The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

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MR. JAMES H. CROFTS, STOCK AND SHARE BROKER, AND MINING SHARE DEALER,
No. 1, FINCH LANE, CORNHILL, LONDON, E.C.
ESTABLISHED 1842.

BUSINESS transacted in all descriptions of MINING Stocks and Shares (British and Foreign), Consols, Banks, Bonds (Foreign and Colonial), Railways, Miscellaneous, Insurance, Assurance, Telegraph, Shipping, Canal, Gas, Water, and Dock Shares.

BUSINESS negociated in Stocks and Shares not having a general market value.

BUSINESS in COLLIERY and IRON Shares, and in the principal WAGON and MANUFACTURING COMPANIES of the NORTH of ENGLAND and SCOTLAND.

BUSINESS in all the principal COTTON SPINNING Shares.

Mr. J. H. CROFTS, having now established CORRESPONDING AGENCIES in all the CHIEF TOWNS of the United Kingdom, is prepared to deal in the various LOCAL Stocks and Shares at close market prices.

ACCOUNTS OPENED FOR THE FORTNIGHTLY SETTLEMENT.

A Daily Price List, issued at 5 P.M., giving latest Quotations up to close of Market. Also, on the 1st of every month a List of all Securities currently dealt in upon the Mining and Stock Exchanges, with latest prices, current dividends, rate of interest yielded at market price, &c., and every Friday a general List containing closing prices of the week.

MINES INSPECTED.

BANKERS: CITY BANK, LONDON; SOUTH CORNWALL BANK, ST. AUSTELL.

SPECIAL DEALINGS in the following, or part:—

50 Aberdaunant.	25 Hultafall, £4.	50 Rookhope, 17s. 3d.
50 Bodidris.	50 Javali, 7s. 6d.	10 Richmond, £12 7s. 6d.
50 Cardiff & Swan, 19s.	10 Leadhills, £35/8.	25 Roman Grav., £7 18 9
30 Chapel House, £3 3s 9	25 Llanrwst.	20 St. Harmon, 35s.
50 Chontales, 12s. 3d.	25 N. Quebrada, 32s. 6d.	25 Tankerville, £4.
75 Combmartin, 2s.	20 N. Zea. Kapan., 10s.	10 Van, £22½.
20 Devon Con., £2½.	50 North Laxey, 4s.	30 Van Consols, 9s.
20 East Van, £4¾.	50 Pandora.	25 W. Tankerville, 9s.
25 Flagstaff, 17s. 6d.	50 Penstruthal, 6s.	40 ditto Preference, 20s.
25 Glyn, 17s.	20 Pestarena, 5s.	25 W. Wye Valley, £22/8.
50 Glenroy, 19s.	50 Parys Moun., 8s. 9d.	20 Wye Valley, £1¾.
10 G. Laxey, £18¼.	50 Port Phillip, 12s.	

*** SHARES SOLD FOR FORWARD DELIVERY (ONE, TWO, OR THREE MONTHS) ON DEPOSIT OF TWENTY PER CENT.

THE D'ERESBY MOUNTAIN DISTRICT.—
SPECIAL BUSINESS in—
D'ERESBY MOUNTAIN. | LLANRWST.
D'ERESBY CONSOLS. | PANDORA.
SHARES on SALE at the LOWEST NET PRICES.
JAMES H. CROFTS, 1, FINCH LANE, LONDON.

FOREIGN BONDS—ARGENTINE—EGYPTIAN—RUSSIAN, TURKISH, SPANISH, PERU, &c.
SPECIAL BUSINESS in the above, and Fortnighty Accounts opened on receipt of the usual cover.
JAMES H. CROFTS, 1, FINCH LANE, LONDON.

RAILWAYS—HOME AND FOREIGN.—
SPECIAL BUSINESS in the above, and Fortnightly Accounts opened on receipt of the usual cover.
JAMES H CROFTS, 1, FINCH LANE, LONDON.

MISCELLANEOUS AND TRAMWAY SHARES.—
SPECIAL BUSINESS in—

MISCELLANEOUS.	CHEMICAL.	TRAMWAYS.
Alhambra Palace.	Lawes.	Argentine.
Fore-street Warehouse.	Langdale.	Bristol.
Halcomb Sack.	Newcastle.	Edinburgh.
Positive Assurance,		Glasgow.
And other Shares.	TELEGRAPHS.	London.
AQUARIUM.	Direct.	North Metropolitan.
Brighton.	Globe.	Tramways Union.
Royal (Westminster).	Telegraph Construction	And others.
Yarmouth.	W. India and Panama.	

BUSINESS TRANSACTED in all MISCELLANEOUS SHARES (of whatever description) having LONDON or COUNTRY MARKET VALUES.
JAMES H. CROFTS, 1, FINCH LANE, LONDON.
Bankers: City Bank, London; South Cornwall Bank, St. Austell.
ESTABLISHED 1842.

MR. W. H. BUMPUS, STOCK AND SHARE BROKER, AND MINING SHARE DEALER,
44, THREADNEEDLE STREET, LONDON, E.C.
ESTABLISHED 1867.

BUSINESS transacted in STOCK EXCHANGE SECURITIES and MISCELLANEOUS SHARES of every description.

RAILWAYS, BANKS, FOREIGN and COLONIAL BONDS, TRAMWAYS, TELEGRAPHS, and all the LEADING INVESTMENTS,
Accounts opened for the Fortnightly Settlement.
A Stock and Share List free on application.

MR. BUMPUS has SPECIAL BUSINESS in the undermentioned:—

50 Aberdaunant, 8s. 6d.	20 East Van, £4 3s. 9d.	15 Pateley Bridge.
30 Assheton.	25 Flagstaff, 14s. 6d.	70 Penstruthal, 6s. 6d.
25 Blue Tent, £2½.	30 Frontino, 36s.	100 Pestarena, 5s. 6d.
50 Bodidris.	5 Great Laxey.	50 Pandora.
100 Chontales, 12s.	100 Glenroy, 18s. 6d.	40 Port Phillip, 12s.
100 Cedar Creek, 5s. 6d.	30 Hultafall.	60 Parys Mount., 9s. 6d.
15 Colorado.	100 Javali, 7s. 6d.	30 Rookhope, 18s. 6d.
50 Don Pedro, 12s. 6d.	50 Kapanga, 11s.	10 Richmond, £12½.
5 D'Eresby Mountain.	40 Llanrwst.	15 Roman Gravels.
15 D'Eresby Consols.	30 Last Chance, 23s. 6d.	20 Tankerville, £4 3s 9d
50 Derwent, 25s.	15 Leadhills, £3 13s. 9d.	60 Tyn-y-Fron.
20 Devon Consols.	25 Marke Valley.	5 Van, £22½.
10 Eberhardt, £6 16s. 3d.	15 Minera.	20 Wheal Grenville.
25 East Caradon.	30 New Quebrada, 36s.	25 W. Tankerville, 9s. 6d
	20 Nerbudda, 21s.	

DEVONPORT AND TIVERTON BREWERY COMPANY.—MR. BUMPUS can supply a limited number of these shares at £3 18s. 6d. each, for cash.
*** BLUE TENT, HULTAFALL, and WHEAL GRENVILLE Shares should now be bought. These are all likely to be much higher before long.
SPECIAL BUSINESS, at close prices, in the SHARES of all the principal HOME and FOREIGN MINES.

WILLIAM HENRY BUMPUS, SWORN BROKER.
Offices: 44, Threadneedle Street, London, E.C.
BANKERS—The NATIONAL PROVINCIAL BANK OF ENGLAND, E.C.

MR. GEORGE BUDGE, STOCK AND SHARE DEALER,
9, GRACECHURCH STREET, LONDON, E.C. (Established 28 years),
ALL BUSINESS TRANSACTED FREE OF ANY CHARGE FOR COMMISSION.
Notice to Investors and Speculators.
MR. BUDGE has SPECIAL DEALINGS in—

65 Alamillos, 26s. 3d.	30 Grogwinion, £3¼.	20 Cargoll.
50 Alltami.	50 Gawton.	65 Red Rock, £1¾.
100 Bedford United.	125 Gold Run, 8s. 6d.	200 Rica.
65 Blaen Caelan, £3½.	50 Green Hurth.	25 Royal Aquarium.
50 Cotton Powder.	25 Hornachos, £14.	10 Santa Barbara, 25s 6d
40 Chapel House.	35 Hughes Locomotive.	20 Liverpool Uni. Tram.
25 Caron, £2¼.	3 Lisburne.	25 St. Harmon.
50 Combellack, 15s. 6d.	50 London and County Land Buildings.	50 Colorado, £4½
100 Cambrian, £2 19s. 3d.	60 New Quebrada, 31s.	10 John Bagnall, £2½.
50 Devonport and Tiverton Brewery.	40 Mellanear.	35 S. Cwmystwith, £3¾.
10 D'Eresby Con., £10 10s	75 Monydd Gorddu.	5 Van, £22.
25 Eberhardt, £6½.	50 Pennant.	50 Wye Valley, £2.
100 Exchequer, 3s. 6d.	60 Penhalls.	60 W. Wye Valley, £3.
100 Flagstaff, 3s. 6d.	150 Prince of Wales.	20 So. Frances, £2 16s 9d
		100 Ladywell.

Also in—2 New River £100 shares; 5 Anglo-Egyptian, £22¾; 10 Bank of New Zealand; 5 Bank of Egypt; 20 Van Diemen's Land; 100 Rio Tinto shares; 10 City Bank, £17¾; 2 Paris Decature £100 Bonds, £25; 200 Credit A shares, $20,000; Atlantic and Great Western Railway First Mortgage; 2 Imperial Continental Gas.
BUYERS or SELLERS of any of the above, or holders of any stocks or shares not readily marketable will do well to apply to Mr. Budge.
ALL BARGAINS SETTLED PROMPTLY.

MESSRS. PETER WATSON AND CO.,
54, OLD BROAD STREET, LONDON, E.C.
BUSINESS in STOCKS and SHARES.
RAILWAYS, BANKS, DIVIDEND LEAD MINES, &c.
BANKERS: The ALLIANCE BANK (Limited).
A CIRCULAR published MONTHLY. Single copy, 6d.; annually, 5s.

MR. ALFRED E. COOKE,
STOCK AND SHARE DEALER,
76, OLD BROAD STREET, LONDON, E.C.
ESTABLISHED 1853.

SOUND AND PROFITABLE ADVICE.
RAILWAY STOCKS.
BRIGHTON A Stock was strongly recommended to be purchased at 120—now 141½.
METROPOLITAN DISTRICT Stock was strongly recommended at 46—now 62.
MINES.
D'ERESBY MOUNTAIN Shares were strongly recommended at 25—now 80.
COLORADO UNITED Shares were strongly recommended at 2½—now 4½.
There are now other genuine speculations and investments to be secured.
ALFRED E. COOKE.

THE "INVESTORS' GAZETTE" of this week, published every FRIDAY EVENING, contains REPORTS on MINES personally visited by Mr. COOKE during the past week. Subscription, 2s. 6d. per quarter; single number, post free for three stamps.
ALFRED E. COOKE, STOCK AND SHARE DEALER,
76, OLD BROAD STREET, LONDON.
Established 1853.

MR. JAMES STOCKER, STOCK AND SHARE BROKER, AND MINING SHARE DEALER,
2, CROWN COURT, THREADNEEDLE STREET, LONDON, E.C.
[Established 1848.]
RAILWAYS, FOREIGN BONDS, BANK, INSURANCE, TRAMWAY, and all MISCELLANEOUS STOCKS and SHARES.

Aberdaunant, 8s.	Parys Mountain, 8s. 6d.	Colorado, £4½.
Bodidris, 25s.	Pateley Bridge, 38s. 6d.	Chontales, 12s.
Chapel House, £3¼.	Roman Grav., £7⅞.	Don Pedro, 12s. 9d.
D'Eresby Con., £10 6 3	Rookhope, 17s. 6d.	Eberhardt, £7.
Devon Consols, £2⅝.	South D'Eresby, 25s.	Exchequer, 4s.
East Van, £4¾.	So. Condurrow, £11¾.	Flagstaff, 16s.
Grogwinion, £3 6s. 3d.	St. Harmon, 35s.	Frontino, 35s.
Glenroy, 16s. 6d.	Tankerville, £4.	Hultafall, £3⅝.
Great Laxey, £18.	Van, £22¾.	Javali, 7s. 6d.
Glyn, 13s.	United Mexican.	Last Chance.
Leadhills, £3 10s.	Wye Valley, £1½.	N. Zealand Kap., 10s.
Llanrwst.	West Wye Valley, £2¾.	Pestarena, 4s. 9d.
Pandora, 13s.	West Chiverton, £9½.	Port Phillip, 11s. 3d.
		Richmond, £12.

Minera, Wheal Crebor, West Godolphin. —— Almada, Argentine, Chicago, Hornachos, Javali, Malabar, South Aurora, Tolima.——Alltami, New Shariston, Thorp's Gawber. —— Credit Foncier, Hudson's Bay, Lawes Chemical, Native Guano. BANKERS: LONDON AND WESTMINSTER.

MR. T. E. W. THOMAS, SHARE BROKER,
3, GREAT WINCHESTER STREET BUILDINGS, E.C.
Established 1857.

The following are the latest prices at which business could be done. Where the difference between the buying and selling price is wide transactions may be effected at an intermediate price:—

	Buyers.	Sellers.		Buyers.	Sellers.
Aberdaunant	8s.	9s.	New Quebrada	£ 1⅝	£ 1¾
Bodidrjs	1⅛	1⅜	New Zealand Kapanga	7s 6d.	10s.
Chicago	⅛	¾	North Laxey	2s.6d.	3s.6d.
Chontales	10s.	12s.	Parys Mountain	7s.6d.	8s.6d.
D'Eresby Consols	9⅛	10	Pateley Bridge	1¼	1¾
Devon Great Consols	2¼	2½	Plynlimmon	2s.6d.	3s.6d.
Don Pedro	12s.	14s.	Richmond	12	12¼
Eberhardt	6¾	7	Roman Gravels	7½	8
East Caradon	7s.6d.	12s. 6d.	Rookhope	17s.	19s.
East Van	4⅛	4⅜	South Condurrow	11	11¼
Flagstaff	14s.	16s.	South Frances	2½	3
Frontino	1⅝	1⅞	Tyn-y-Fron	1¾	1½
Glenroy	15s.	16s.	Tankerville	3¾	4
Glyn	12s.6d.	15s.	Tincroft	10	12
Gorsedd and Merllyn	3½	4	Van	23	23
Grogwinion	3	3¼	West Chiverton	8	9
Great Laxey	17	19	West Pateley Bridge	1¾	2
Hingston	7s.	9s.	West Godolphin	½	1
Hultafall	3⅛	4	West Tankerville	10s.	12s.6d
Last Chance	1	1¼	West Wye Valley	2¼	2½
Ladywell	15s.	17s.	W. Grenville	2¾	3
Leadhills	3¼	3½	Wheal Kitty	1½	2
Marke Valley	14s.	16s.	Wye Valley	1⅞	1¾
Mellanear	3¼	3½	Yorke Peninsula	4s.	6s.

Selections, founded on practical mining knowledge, made for the use of investors. An experience of 20 years.—Business on hand in East Van, Roman Gravels, Leadhills, Gorsedd & Merllyn, Bodidris, Tyn-y Fron, & other Lead Mines.

WILLIAM GABBOTT, STOCK AND SHARE DEALER,
8, DRAPER'S GARDENS, THROGMORTON STREET,
LONDON, E.C.

MESSRS ENDEAN AND CO., 85, GRACECHURCH STREET,
LONDON, E.C., STOCK AND SHARE DEALERS.
Established in 1861.
Bankers: Barclay, Bevan, and Co., and London and Westminster Bank, Lothbury.

English and Foreign Stocks and Shares and all other Securities dealt in for cash or account.
Messrs. ENDEAN and Co. have SPECIAL BUSINESS in the undermentioned—

125 Aberdaunant.	100 North Laxey, 4s.	25 Chontales, ⅘.
45 Bodidris, 27s. 6d.	20 Pandora.	15 Don Pedro, 13s.
3 D'Eresby Mountain.	15 Parys Mount., 9s.	30 Eberhardt, £6⅞.
25 D'Eresby Consols.	10 Pateley Bridge, £1¾.	120 Flagstaff, ⅝.
50 Devon Consols, £2½.	100 Penstruthal, 8s.	10 Frontino, £1¾.
35 East Van, £4½.	25 Roman Gravels, £7⅞.	10 Hultafall, £3⅞.
10 Grogwinion, £3¾.	30 Rookhope, 18s.	30 Javali, 8s.
25 Glenroy.	50 South de Eresby.	75 Last Chance, £1½.
5 Great Laxey, £18.	10 Tankerville, £4.	10 N. Zeald. Kap., 10s.
30 Leadhills, £3½.	10 Wheal Grenville, £3½	20 Port Phillip, 11s.
60 Llanrwst.	20 Chicago, ⅜.	50 Richmond, £12.

THE LLANRWST MINING DISTRICT.—
The LLANRWST MINE is the PRINCIPAL one of this DISTRICT. It is fully equipped with every modern appliance for economical working on the most extensive scale.
The lodes are prolific, and the monthly sales of lead are large and increasing, exceeding that of the whole of the other mines in this district put together.
Having our own agents in this district, we are in a position to afford investors the latest and most reliable information respecting Llanrwst, D'Eresby Mountain, D'Eresby Consols, and South de Eresby Mountain Mines.
Apply to ENDEAN and Co., 85, Gracechurch-street, London, E.C.

JOSEPH JOHN PYNE,
STOCK AND SHARE BROKER, AND MINING SHARE DEALER,
6, BISHOPSGATE, LONDON, E.C.

Mr. PYNE having been connected with MINING ENTERPRISE for upwards of FOURTEEN YEARS, and having been a DIRECTOR of MINES in SHROPSHIRE, MONTGOMERYSHIRE, CARDIGANSHIRE, CARNARVONSHIRE, YORKSHIRE, and in VENEZUELA, has had great opportunities of becoming acquainted with this particular branch of industry, and will always be desirous of giving every information in his power to all parties transacting business with him.
ALL DESCRIPTIONS OF SHARES are dealt in, including BRITISH and FOREIGN STOCKS, and RAILWAY SECURITIES.
A DAILY SHARE LIST issued, giving latest quotations up to the close of the market.
AN EXTENDED LIST made up to the first of every month of all securities usually dealt in, giving highest and lowest prices for the month, the current dividends, and when payable, with amount of interest calculated at the present market price. Will be forwarded when desired.
MR. PYNE DOES NOT ISSUE ANY CIRCULAR.
BANKERS—THE ALLIANCE BANK (LIMITED).

MR. CHARLES THOMAS,
MINING AGENT, STOCK AND SHARE DEALER,
3, GREAT ST. HELEN'S, LONDON, E.C.

MR. ALFRED THOMAS,
MINING AGENT, AND STOCK AND SHARE DEALER.
10, COLEMAN STREET, LONDON, E.C.

"INVESTMENTS AND SPECULATIONS" for 1878,
Price Sixpence.

BUSINESS IN THE FOLLOWING MINE SHARES.

120 Aberdaunant.	50 Great Laxey.	80 South Cwmystwith.
165 Bodidris.	100 Grogwinion.	100 Saint Harmon.
100 Cambrian.	110 Hultafall.	50 Tankerville.
30 D'Eresby Consols.	110 Ladywell.	20 Tincroft.
3 D'Eresby Mountain.	100 Ditto Preference.	150 Tolgus Consols.
5 Dolcoath.	80 Leadhills.	20 Van.
100 East Chiverton.	100 Llanwrst.	37 West Chiverton.
20 East Pool.	163 Pandora.	200 West Pateley Bridge.
50 East Van.	100 Pateley Bridge.	120 West Tankerville.
125 Glenroy.	105 Red Rock.	100 Ditto Preference.
100 Gorsedd and Merllyn.	50 Roman Gravels.	50 West Wye Valley.
90 Great Holway.	155 Rookhope.	100 Wye Valley.

Intending Investors should apply to us for Shares in the above Mines.
THE LOWEST PRICES WILL BE FORWARDED UPON APPLICATION, OR OFFERS CAN BE MADE WHICH MAY LEAD TO BUSINESS.
Shareholders wishing to sell Shares in above should forward us their instructions.
GOULD SHARP AND CO., STOCK AND SHARE BROKERS,
42, POULTRY, LONDON, E.C.—ESTABLISHED 1852.
Bankers: London and Westminster, Lothbury, London, E.C.

MR. EDWARD ASHMEAD, 62, CORNHILL, LONDON,
LONDON MINE AGENT, ACCOUNTANT, AND AUDITOR.

FERDINAND R. KIRK, STOCKBROKER,
5, BIRCHIN LANE, E.C.
Has BUSINESS in—

20 Alamillos, £1¼.	20 D'Eresby Con., £10.	30 Leadhills, £3 11s.
50 Bodidris.	30 East Caradon, ⅝.	25 Panulcillo, 18s.
10 Colorado.	25 East Van, £4½.	50 St. Harmon.
40 Chicago.	10 Great Laxey, £18¼.	10 United Mexican, £3½
30 Devon Consols, £3⅝.	20 Grogwinion, £3¼.	15 Van, £22½.
60 Don Pedro, 12s. 6d.	50 Hultafall, £3⅞.	20 Wye Valley.

FORTNIGHTLY ACCOUNTS.
A large business is now being done in Egyptian, Unified, and Preference, Turkish 1865 and 1871, Argentine, Spanish, and Bolivian.
In Railways, Brighton, South-Eastern, Chatham, British, Caledonian, and District engage most attention. The necessary COVER may be learnt on application.
Bankers: London and Westminster, Lothbury.

MR. E. J. BARTLETT, STOCK AND SHARE DEALER,
No. 30, GREAT ST. HELEN'S, LONDON, E.C.
Capitalists should read the Tenth Edition of "How and When to Invest," post free One Shilling, and a small Pamphlet containing information regarding investments unaffected by war. The latter free by post on application.
SPECIAL BUSINESS in East Lovell, East Van, D'Eresby Mountain, Chapel House Colliery, Great Laxey, Minera, Richmond, Bodidris, and South Condurrow shares.

MR. THOMAS THOMPSON, JUN., STOCK BROKER,
1, PALMERSTON BUILDINGS, BISHOPSGATE STREET,
LONDON, E.C.
Mr. THOMPSON transacts business in every species of Stock Exchange and Mining Securities.
Mr. THOMPSON affords reliable information to investors, and can give, when desired, a list of first-class Stocks and Shares, yielding 4 to 10 per cent. dividends upon present prices.—Mr. THOMPSON'S weekly Circular may be had on application.

MR. W. MARLBOROUGH, STOCK AND SHARE DEALER,
29, BISHOPSGATE STREET, LONDON, E.C. (Established 21 Years),
can sell the following SHARES, at prices annexed:—

50 Aberdaunant	30 Flagstaff, 16s. 3d.	10 Richmond, £11 17s 6d
15 Blaen Caelan, £4 5s 6d	10 Gorsedd & Merl. £4½	30 So. de Eresby, £1 6s 3
40 Chontales, 11s. 3d.	15 Grogwinion, £3 7s. 6d	10 Roman Grav., £7 17 6
20 Chapel House, £3 5s.	25 Hultafall £4.	20 Tankerville, £4.
10 Colarado, £4 15s.	5 Minera, £10 7s. 6d.	50 Tyn-y-Fron.
75 Don Pedro, 12s.	25 Last Chance, £1 2s. 6d	5 Van, £22¾.
7 D'Eresby Con., £10 6 3	25 Pandora, 16s. 9d.	30 W. Tankerv., 9s.
15 East Van, £4 7s. 6d.	20 Pateley Bridge, 1 18 9	5 West Chiverton, £9.
20 Eberhardt, £6 15s.	50 Parys Mount., 9s.	5 W. Craven Moor, £8⅛
30 Frontino, £1 16s. 3d.	50 Port Phillip, 11s. 6d.	20 W. Wye Valley, £2¾.

FOR SPECIAL SALE.—25 Devon Consols, £2 11s. 3d.; 10 Rookhope, 18s. 6d.; 90 Yorke Peninsula, 5s. 3d.; 20 Leadhills, £3 11s. 3d.; 200 Rossa Grande, 2s. 3d.—Wanted—100 Gold Run, 3s. 9d.
Shares bought and sold at net prices. Telegrams promptly attended to.
Specially Recommended for an early rise in price:—Gorsedd and Merllyn, Bodidris, Tyn-y-Fron, Hultafall, Pandora and D'Eresby Mountain.

MESSRS. JONES AND HOUSTON, 25, CROSBY HALL CHAMBERS, BISHOPSGATE STREET WITHIN, LONDON, E.C.
The following SHARES FOR SALE, free of commission:—

100 Aberdaunant, 9s.	10 Glenroy. 18s.	50 Pateley Bridge, £1¾.
50 Bodidris, 25s.	15 Grogwinion, £3 5s.	50 Parys Mount, 8s. 9d.
40 Chontales, 11s. 6d.	20 Gt. Laxey, £18 10s.	100 Penstruthal, 5s. 6d.
15 Chapel House, £3 3s 9	10 Gorsedd and Merllyn, £4.	100 Port Phillip, 12s.
10 Cardiff and Swan, 17s		20 Richmond.
25 D'Eresby Con., £10¾.	25 Hultafall, £3 16s. 3d.	15 Roman Grav., £7 3s.
2 D'Eresby Mountain.	15 Leadhills, £3 15s.	20 Rookhope, 18s.
100 Don Pedro, 13s.	10 Ladywell.	100 South Aurora.
10 Eberhardt.	10 Clay Hall Colliery (offer wanted).	15 Tankerville, £3 18s. 9d
40 East Van, £4 7s. 6d.	1 5New Quebrada.	30 Tyn y Fron, £1 1s.
10 Flagstaff, 17s.	100 North Laxey, 3s. 6d.	15 Wye Valley, £1 15s.
20 Frontino.		20 W. Wye Val., £2 15s.

FOR SALE, a few Shares in the celebrated Wheal Newton Silver Mine. A sale of from 13 to 14 tons of rich silver ore has just taken place, upwards of 7 tons realising £368 per ton, and the remainder from about £30 to £35 per ton. Another dividend will shortly be declared. Don Pedro, Hultafall, and Tyn-y-Fron strongly recommended for a rise.
Bankers: London and Provincial.

MR. JOHN B. REYNOLDS, STOCK AND SHARE DEALER,
70 AND 71, BISHOPSGATE STREET WITHIN, LONDON, E.C.
Established Twenty Years.
Bankers: London—City Bank.
Cornwall—Messrs. Tweedy, Williams, and Co., Redruth.

WILLIAM B. COBB, STOCK AND SHARE DEALER,
62, CORNHILL, LONDON, E.C.
Bankers: The Alliance Bank (Limited).
HORNACHOS.—Special business in these shares.

MESSRS. EKINS AND CO., STOCK AND SHARE DEALERS,
14, QUEEN VICTORIA STREET, MANSION HOUSE, LONDON.
Bankers: Metropolitan.

SOUTH DE ERESBY MOUNTAIN MINE.
Large numbers of shares in this mine have been absorbed, and with every fresh discovery they will undoubtedly rise in price. The following telegram, sent on the 12th inst., shows that Capt. Bennetts' reports, which have appeared in the Journal from time to time, have not been too sanguine. South de Eresby lodes, in common with those in other mines of the district, improve in depth, and the specimens now lying at the company's offices show that the lode referred to is a masterly one:—
COPY OF TELEGRAM.
"Lode in shaft considerably improved, producing large lumps of solid lead—have sent to-day by rail box of specimens which came from the bottom of shaft."
For shares in this company apply to Messrs. EKINS and Co., 14, Queen Victoria-street, London, E.C.

FOR SALE.

		BUYER or SELLER.	
20 Cargoll	£ 2	100 Hornachos	£13 to £15
100 Hultafall	—	5 D'Eresby Mountain	80 to 90
10 D'Eresby Consols	11	50 Temple	—
50 Glyn	16s.	100 Tyn y-Fron	—
		50 Bodidris	—
		50 Chapel House Col...	—

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Lectures on Practical Mining in Germany.

CLAUSTHAL MINING SCHOOL NOTES—No. LXXVII.*

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SECTION V.

Where there is any probability that the driving may sink down in the ground, in spite of the large surface offered by the ground sills, nothing remains but to cover the floor completely. This is usually accomplished by laying long boards of a convenient thickness and breadth across the whole width of the level. These boards are placed crossways to the direction of the level, and where necessary held down by short cross bars in the centre. They should project at each end beyond and beneath the side piles.

Where the floor is very bad it may be necessary that it should be spilled. This is effected in the ordinary way, the chief difference being that the piles receive a much greater inclination.

When the first field of timbering has been completed in the manner above described, it will be necessary before inserting the permanent door-set, which shall form the commencement of the next set of timbering, to insert the Pfandung which shall surround it, and between which and the door-set the next lot of piles will have to be inserted. The Pfandung must be laid close against the piles, and any open spaces which may be unavoidably left must be filled up with straw and the like. Until the insertion of the next set of piles the Pfandung must be supported against the door-set by the means of wedges, which are removed as the piles are inserted.

When the working face, owing to the quick nature of the ground, cannot be advanced it is best, perhaps, to stop the work for some time, so as to allow the water the opportunity of draining away from the neighbourhood, or at least to such an extent that the ground by this means becomes more compact. A very doubtful method is that of driving pipes some distance forward into the ground, the pipes being provided with a great number of very fine openings, through which it is intended that the water shall find exit. The holes in the pipe, however, are very liable to be stopped up, especially if the ground is of a clayey nature.

At the Broun Coal Mine, Beust, near Gruneberg, in place of the wooden closing boards hollow cast-iron boxes, open at the back side (that turned from the face of the level) of from 18 in. to 2 ft. in depth, and 1 ft. in height, were used. The cast-iron boxes were supported at each end against the legs of the door-set by short screw sprags. Each box was provided with several openings, through which the loose swimming ground behind could make its way, and which could be closed at any time by plugs. Indeed the openings were usually kept closed, and only opened as was found necessary in order to allow the swimming ground behind to escape. The pushing forward of these cast-iron boxes was effected by placing a short screw-jack between the ends of the box and the legs of the last door-set. The work was found to proceed more rapidly than with the wedges (as in the next to be described method), or with wooden boxes.

The next method we shall describe is one generally attributed to Victor Simon and M. Durieux, and first used in the Louviere and St. Engis Mines, in Belgium. This method differs from all the others in as much as the space for the timbering, &c., is not excavated, but formed by driving back the ground, at the same time effecting a partial drainage of the ground in the immediate neighbourhood of the level. The original description of this method appears to have been given in Ponson's Traitæ, from which the following is taken.

The middle portion of the Bassin (Coal) du Centre, in Belgium, is covered by a large thickness of chalk stratum, and beneath this some clay banks, which give off very considerable quantities of water. When the cross-cuts from the shafts met with these banks further progress was only attained with the greatest difficulty. After numerous ineffectual attempts the method adopted for piercing beneath the Brussels and Charleroi canal with wedges was adopted, and with such success that one of the levels was advanced 580 yards and the other 230 yards in 30 months. The sides and roof of the excavation were protected in the usual manner by means of piles; in front, however, in place of the covering boards an assemblage of wooden wedges are driven in longitudinally, and as close as possible.

After having inserted the piles as before, and having driven them in to a suitable depth (6 to 8 in.), the horizontal wedges are driven forward from 4 to 5 in., commencing with those near the top of the level first, and then proceeding downward to the floor of the level. Into the floor as it becomes exposed short vertical wedges are likewise driven, to prevent the sand, &c., from coming up beneath the level. This driving forward of the wedges, beginning afresh at the roof, is continued in this manner until the floor thus paved with wedges is so far advanced that a floor sill of fir, from 6 in. to 8 in. thick can be laid down, and on this two leg pieces, from 5 in. to 6 in. diameter, are placed, and surmounted by a cap piece.

When by the aid of this temporary lining an advance of 5 or 6 metres into the mass of quick sand has been attained, a more solid set of timbering is introduced, composed of frames jointed together, and of which the floor sills form an integral part. Each frame is about 5 ft. high by 4 ft. broad, inside measurement, and constitutes essentially a portion of a horizontal watertight lining, being 9 in. to 12 in. broad, and about 5 in. thick. The frames are placed close together, and the four longitudinal corners are covered by a stringing piece triangular in section. In the roof, where it is impossible to introduce the wedges, the driving is carried forward by means of ordinary spilling, in which the piles are all planed and fitted close together. This, however, is afterwards covered by the cap pieces of the solid timbering.

The wedges employed at Louviere are conical in shape, uniform and regular on the surface, in order better to facilitate driving them into the quick sand. They are made of beech or oak, cut as far as possible from knots. The length of those destined to form the mask varies, according to the fluidity of the ground, from 1 ft. to 2 ft. in length. Their resistance to the blows of the hammer is less the shorter they are, but they then require replacing more frequently, the mask is not solid, and they are more easily driven back into the space excavated, which may result in a destruction of the mask, or an obstruction to pushing forward of the gallery. When they are long they offer a great surface for frictional resistance against the sand, and they likewise require a greater force (a greater number of blows) to drive them forwards, which destroys or flattens the head of the wedge, necessitating its withdrawal and replacing, an operation which may readily lead to an accident or stoppage of the work. In very fluid strata the mask of wedges has a tendency to sink down, so that it is nearly always at the roof that the ground uncovers itself, and where it is necessary to insert fresh wedges. If they are too long they offer a large surface to the action of this tendency to sink the mask, and it is impossible for any very great distance to keep them in a horizontal position. On the contrary, they have always a tendency to have the front sharp end of the wedge directed downwards, and this change in their direction entails great inconvenience, for it will be found almost impossible to withdraw those near the foot of the mask. They are usually driven forward into the ground, and offer, as a consequence, considerable obstruction to the driving in of the floor wedges. Those which have lost their horizontal position leave wide spaces between them, through which the quick ground can find access; and, lastly, as they cannot then be properly supported the one against the other, the solidity and impermeability of the mask is greatly compromised. For the wedges used for driving into the floor, as they receive only a limited number of blows, and are not likely to be forced out of their position, and above all since they are not each continually driven forward, a length of 6 in. to 10 in. is generally found sufficient; indeed, the wedges belonging to the mask, which have become too short, and are withdrawn, may be used for driving into the floor.

Those wedges which are used for driving into ground of a mean fluidity have a diameter of 3 in. to 6 in. at the head. Since, however, wedges of this diameter would have a space between them for the passage of very quick ground they are in such a case only made from 2½ in. to 4 in. diameter at the head.

It will be readily comprehended that the wedges forming the mask will only require renewal as they become too short, or are destroyed or lost in the ground, so that a single wedge may still form a portion of the mask in driving a considerable distance. Those in the floor are irrecoverably lost, and likewise those of the sides. In going through very quick ground the wedges are replaced by spilling. The wedges are driven in not by blows directly on the head of the wedges, but on a cylinder of wood, furnished at both the ends with a hoop of iron placed against the heads of the wedges.

In driving through a bank of sand 16 yards thick at St. Engis mines by this method the wedges were made cylindrical for part of their length, and for the remainder conical, and in place of the hammer and cylindrical block of wood, we have just described, an iron stamper, with a short cylindrical head, was used for driving forward the wedges.

The impermeability of the mask is an essential condition of success, and all open spaces between the wedges are closed with hay or straw packed tight into the openings, into which short pegs are driven, which compressing the wisps of hay tight against the wedges effectually close these spaces against the entrance of the quick ground. When the piles of the sides leave any open spaces, these are closed at once by driving in short wedges. Should, in consequence of the drainage of the water from the ground in front of the mask, the latter become so solid that the resistance to the driving forward of the wedges become too great, some of the wedges are withdrawn to release and loosen the ground in front of the mask.

The substitution of a definite masonry wall takes place much later, when the bank has been driven completely through, and there is no great difficulty in readily conveying the material to the spot. This masonry, or rather brick lining, consists of two side walls laid upon floor sills, and surmounted by a plane cylindrical arch. The quick ground will often have become so solid by the draining of the ground in the immediate neighbourhood of the level as to have become so solid that the wooden lining can be taken up as the masonry is advanced forward. To prevent the accumulation of water behind the brickwork part of this will sometimes be set without mortar, so as to give the water the opportunity of draining through it. This method, besides offering the possibility of penetrating through ground the most difficult, is capable of being carried out with much greater expedition, an advance of 1 yard per day having been attained, whereas previously only ¾ yard per week was effected by means of spilling. This method prevents also the influx of the great volumes of quick ground which takes place by the other method, in which 30 or 40 cubic yards were often per yard of advance, whilst by means of this new method the amount of ground removed has often only been 2½ cubic yards per yard advance. This circumstance is not only an advantage in a point of transport, but tends to prevent the formation of any large empty spaces in the neighbourhood of the level, which would be dangerous. At St. Engis the level when finished in brickwork, composed of two side walls and an ordinary and inverted arch (two bricks in thickness), had a height of 10 ft. and a width of 9 ft. in the clear.

This method of Simon's has been combined by Herr C. A. Sickel, of Freiberg, with the ordinary method of spilling. The door sets are not placed close together, but about 1 ft. or 18 in. apart. The ground or floor sill is composed of a solid piece or block, the legs and cap, however, are formed double (*i.e.*, the one part placed inside the other), and in such a manner that the slit between the two halves of the cap piece diverges upwards, and that between the two portions of a leg outwards, the piles are driven forward through these slits and beyond the heads of the wedges; as the piles are driven forward a fresh door-set is inserted as soon as the necessary advance has been made. The piles are usually about double the length between two successive door-sets. The back end of the pile rests in the slit between the two pieces of the door-set, the centre of the pile rests upon and against the outside of the next door-set in advance, the front end of the pile being buried completely in the quick ground.

* Being Notes on a Course of Lectures on Mining, delivered by Herr Bergrath Dr. Von Groddeck, Director of the Royal Bergakademie, Clausthal, The Harz, North Germany.

GEOLOGICAL SOCIETY OF LONDON.

June 5.—JOHN EVANS, D.C.L., F.R.S. (Vice-President), in the chair.

William Santo Crimp, Clarges-street; and Joseph Richard Haines, Adderley Green Collieries, Stoke-on-Trent, were elected Fellows of the Society.——Arthur Goodger, Albert Academy, Burghersdorp, Cape Colony; Rev. Walter Howchin, Haltwhistle, Northumberland; Lieut.-Col. C. A. McMahon, Hissar, Punjâb; Oswald Milton Prouse, C.E., Westbourne House, Shaftesbury-road, Hammersmith; and M. G. Stuart, B.A., St. John's College, Cambridge, were proposed as Fellows of the Society.——Charles Louis Buxton, Bolwick Hall, Marsham, Norwich; Wybrandts G. Olpherts, Chief Engineer's Office, East India Railway, Calcutta; and Wm. Phelps Richards, the Poplars, Shepherd's Bush, will be balloted for as Fellows of the Society.

The following communications were read:—

1.—On the Quartzites of Shropshire," by Charles Callaway, M.A., B.Sc., F.G.S.

In a former paper (Q. J. G. S. xxxiii. p. 652) the author indicated that part of the so-called quartzites of the Wrekin are "Hollybush Sandstone"; in the present communication he shows that the whole, both in the Wrekin and Church Stretton areas, are of Cambrian or Precambrian and not of Caradoc age.

In the Wrekin area the quartzites rest unconformably against the volcanic axis in a nearly continuous band, dipping away from it at angles of from 30° to 55°, their present position being due to its elevation. The volcanic rock is a bedded Precambrian tuff, which reappears in Lawrence Hill and the Ercal, also accompanied by quartzites overlain by Hollybush sandstone. Caer Caradoc belongs to the same volcanic series, and the quartzites reappear on its S.E. flank, overlain by Hollybush sandstone containing Kutorgina cingulata and Serpulites fistula, above which follow the Shineton Shales, and next, separated by a fault, the Hoar Edge grits (Lower Caradoc). The author believes that the apparently conformable succession here is due to parallel faults. Along the S.E. flank of the Wrekin the quartz rock dips S.E., while the volcanic rocks dip N., and fragments of the latter are contained in its base. The author is inclined to consider this a friction-breccia, and the junction a faulted one. He also regards the junction with the Hollybush sandstones as a faulted one, and maintains that in any case the quartzites are older than the latter rocks, which are sometimes considered the equivalents of the Ffestiniog group, and by Mr. Belt to be Menevian. The quartzites can hardly belong to any part of the Upper Cambrian, and the author passes on to consider the various positions which they may be held to occupy, and gives reasons for thinking that they are Precambrian. The only fossil that has been found in them is a supposed worm-burrow. In conclusion the author expresses the opinion that the Stiper-stones quartzites are of Arenig age.

Dr. GWYN JEFFREYS doubted whether the boring had been that of an Annelid, especially as the rock was not calcareous.

Mr. ETHERIDGE expressed his agreement with the position assigned to the Hollybush sandstone in the area described by the author, and thought that the results of the paper were of great interest and value.

Dr. HICKS thought that the burrow was very like one in the Stiperstones and in similar sandstones in Scotland, and that the quartzites were hardly so old as the author supposed, but he agreed with the author as to the probably Precambrian age of the volcanic group.

Mr. CALLAWAY responded, giving some explanation of the apparent difficulties in the sections, which were to be explained by faults. In reply to Dr. HICKS, he held that the stratigraphical position of the quartzite was far more decisive than lithological resemblance or the similarity of Annelid-burrows.

2.—"On the Affinities of the Mosasauridæ, Gervais, as exemplified in the bony structure of the fore fin," by Prof. Owen, C.B., F.R.S., F.G.S., &c.

3.—"On new Species of Procolophon from the Cape Colony, preserved in Dr. Grierson's Museum, Thornhill, Dumfriesshire, with some remarks on the affinities of the Genus," by Harry Govier Seeley, F.L.S., F.G.S., &c., Professor of Geography in King's College, London.

4.—"On the Microscopic Structure of the Stromatoporidæ, and on Palæozoic Fossils mineralised with Silicates, in illustration of Eozoon," by Principal Dawson, LL.D., F.R.S., F.G.S.

5.—"On some Devonian Stromatoporidæ," by A. Champernowne, F.G.S.

6.—"On a new Species of Loftusia from British Columbia," by George M. Dawson, D.Sc., F.G.S., Assoc. R.S.M., of the Geological Survey of Canada.

The next meeting of the Society will be held on Wednesday, June 19, when the following communications will be read:—

1. "On the Section of Messrs. Meux and Co.'s Artesian Well in the Tottenham Court-road, with notices of the Well at Crossness, and of another at Shoreham, Kent; and on the probable range of the Lower Greensand and Palæozoic Rocks under London," by Prof. J. Prestwich, M.A., F.R.S., F.G.S.—2. "Notes on the Palæontology and some of the Physical Conditions of the Meux's-well Deposits," by Charles Moore, F.G.S.—3. "Palanechinus, a new genus of Sea-urchin from the Coral Rag," by W. Keeping, B.A., F.G.S.—4. "Remarks on Saurocephalus, and on the species which have been referred to this genus," by E. Tulley Newton, F.G.S.—5. "A microscopical study of some Huronian Clay-slates," by Dr. A. Wichmann: communicated by H. C. Sorby, F.R.S., Pres. G.S.—6. "On the distribution of Boulders by other agencies than that of Icebergs," by C. E. Austin, F.G.S.—7. "On a Section through Glazebrook Moss, Lancashire," by T. Mellard Reade, F.G.S.—8. "On the Tertiary deposit on the Solimoes and Javary Rivers in Brazil," by C. B. Brown, with an Appendix by R. Etheridge, F.R.S., F.G.S., and communicated by him.—9. "On the Physical History of the English Lake-district, with notes on the possible subdivision of the Skiddaw Slates," by J. Clifton Ward, F.G.S.—10. "On some well-defined life-zones in the lower part of the Silurian (Sedgw.) of the Lake-district," by J. E. Marr: communicated by Prof. T. M'K. Hughes, M.A., F.G.S.—11. On the upper part of the Bala Beds and Base of Silurian in North Wales," by F. Ruddy: communicated by Prof. T. M'K. Hughes, M.A., F.G.S.

THE PARIS INTERNATIONAL EXHIBITION.

No. V.

[FROM OUR OWN CORRESPONDENTS.]

In continuing our notice on the exhibits presented for our study at the Paris Exhibition in the Victoria Section, we think their representative importance is such as to justify us in giving the fullest details in reference to them and to the colony itself, as circumstances will permit. Indeed, considering the great dulness of trade at home and in other countries, and its probable continuance; the large number of hands out of employ in all departments of manufactures and commerce; and the vast amount of capital lying dormant, but waiting safe and profitable disposal, we should be greatly wanting in our duty were we not to give such particulars and authentic information as may, we venture to hope, prove in some measure worthy of consideration and consequence to the mining public. We, therefore, propose to confine our attention more particularly to those valuable mineral products in which the colony so richly abounds.

The next group of mineral exhibits to which we shall refer are taken from the Lower Palæozoic, Lower Silurian, including rocks of this age metamorphosed by contact with granite, and other igneous rocks. The exhibits numbered 1277 to 1286 inclusive, are specimens of mica schist, argillaceous mica schist, metamorphic schist, and chiastolite slate. Those from 1287 to 1304, inclusive, are metamorphic slate, flagstone, and metamorphic sandstone. Those from 1305 to 1312, inclusive, are quartz, breccia, and grit. The metamorphic flagstone, numbered 1289, was taken from a quarry at Barker's Creek, Castlemaine. At a depth of 150 ft. slabs were obtained from this quarry 15 ft. to 20 ft. square, and from 1 in. to 6 in. in thickness. Those from 1313 to 1382 are sandstone specimens, of different colours and quality, and capable of being employed for many useful purposes. From 1383 to 1392 we have specimens of quartzite. From 1393 to 1483 we have different specimens of slate, some of which are capable of profitable utilisation; 1484 and 1485 are two specimens of shale; and those from 1486 to 1497, inclusive, are mudstone specimens.

From the rocks of Upper Silurian age, including rocks of this age metamorphosed by contact with granite, we have two specimens of gneiss, numbered 1498 and 1499. The former is impregnated with fluor-spar, and the latter with blue and green carbonate of copper. These specimens were taken from an auriferous lode—Bethanga. From No. 1500 to 1507 we have specimens of mica schist, serpentine schist, quartz, breccia, conglomerate, quartzite, and siliceous slate. From 1508 to 1536, inclusive, we have specimens of sandstone different in colour and quality. Those of 1537 to 1558 are slate; and from 1559 to 1564 we have shale. From 1565 to 1571 we have limestone and limestone marble specimens.

From the Upper Devonian we have specimens of quartz-conglomerate, conglomerate, slate, and shale, numbered from 1572 to 1581.

From the Upper Palæozoic we have specimens of breccia, quartz, grit, quartzite, and sandstone, numbered from 1582 to 1602 inclusive.

From the Mesozoic, or Carbonaceous, we have specimens of grit, sandstone, shale, clay-shale, and limestone, numbered from 1603 to 1630. No. 1631, from this series, consists of coals, rather impure, soft, and slaty, obtained from Bellerine. Numbers 1632 to 1635 are also specimens of coal, rather friable and impure, taken from Bass's Range, Gippsland; from the Kilcunda seam, Griffith's Point, Western Port, and from the Queen's seam, Cape Patterson. An analysis of the latter gave the following elements:—Volatile matter, 28·80; fixed carbon, 56·4; hygroscopic water, 4·0; and ash, 10·80: total, 100.

From the rocks of Tertiary age we have breccia, numbered from 1636 to 1638; quartz-breccia, breccia, quartz-conglomerate, numbered from 1639 to 1670. Limestone-conglomerate, quartz-grit and conglomerate, and quartzite, from 1671 to 1703 inclusive. From 1704 to 1720 are specimens of sandstone. Those numbered from 1721 to 1734, inclusive, include the clay series; and those from 1735 to 1758 the limestone series. Specimens of fresh-water limestone are numbered from 1759 to 1769 inclusive; 1770 and 1771 consist of two specimens of lignite. The latter was obtained near Ballarat, where it is 120 ft. in thickness. Numbers 1772 and 1773 consist of two specimens of brown coal, the latter of which has the character of oil shale, and was obtained in Gippsland.

The specimens numbered 1774 to 1790 are those of gold obtained from rocks under different circumstances. The latter consisted of fine scales in ferruginous joints of a quartz boulder. From this peculiar mode of occurrence it has been considered that this gold is of secondary origin; probably it was deposited from a solution infiltrated into the joints of the boulder. The specimens numbered 1791 and 1793 are also of gold, the latter being associated with arsenical pyrites, sulphur, and bismuth; 1794 and 1795 are those of chloro-bromide of silver; 1796 to 1804 consist of native copper mixed with arsenical pyrites, with iron, sulphide of copper, and cuprite, the latter being associated with native copper, azurite, malachite, and quartz. The exhibits from 1808 to 1811 are called tile ore, obtained from gold mining claims. Those from 1812 to 1815 are malachite and azurite. The exhibits numbered from 1816 to 1819 are those of tin. Exhibits numbered from 1820 to 1840 consist of galena, carbonate of lead, arseniate of lead, antimoniate of lead, zinc-blende, and arsenical pyrites. From number 1841 to 1865 we have specimens of iron pyrites, magnetic pyrites, and micaceous iron. From 1866 to 1890 we have a series of specimens of micaceous iron, red and brown hematite ore, and titaniferous iron ore. From 1891 to 1912 we have specimens of sulphide of antimony and earthy oxide of antimony occurring in different forms. Chrome ochre, native sulphur, sapphire, garnet crystals, dark and brown topaz, black tourmaline, rock crystal, smoky quartz, amethystine quartz, quartz, chalcedony, agate, flint, hyalite, wood opal, common opal, horneblende, oligoclase, albite, pitchstone, talcosite,

pholerite, phacolite, chabazite, selenite, calcite, aragonite, magnesite, dolomite, brown spar, ferro-calcite—*i.e.*, carbonate of lime and iron—are exhibited from 1913 to 2086. Specimens of coal and brown coal are exhibited from 2087 to 2092. The exhibits of lignite are numbered from 2093 to 2099 inclusive. Exhibit 2100 refers to an asphaltic substance.

In the Economic Collection, referring to auriferous quartz, we have many valuable particulars worthy of recording. Exhibit numbered 2101 refers to a reef worked 180 ft. beneath the surface, of a width of 9 in., producing 80 ozs. of gold per ton; 2103 produced 2 ozs. 5 dwts.; 2104 produced 1 oz. 5 dwts.; 2105 produced 10 dwts.; 2016 produced 18 dwts. 9 grs.; 2107, 3 ozs., thickness of reef 2 ft.; 2108, 4 dwts., thickness of reef 12 ft.; 2109, 10 dwts., thickness of reef 3 ft.; 2110, 10 dwts., thickness of reef, 6 ft.; 2111, 5 dwts. 12 grs., thickness of reef 14 in. All these specimens were taken at a considerable depth, from 60 ft. to 150 ft.

From the Ararat mining district there are four lots of quartz:—2112 is a sample taken from a reef 24 ft. below the sea level, thickness 5 ft., yielding 2 ozs. 3 dwts.; 2113, 267 ft. below the sea level, width of reef 10 ft., producing 2 ozs. 13 dwts. per ton; 2114, 10 ft. above sea level, thickness of reef 5 ft., producing 2 ozs. per ton.

The following table shows the particulars of gold mining in the Sandhurst mining district:—

Number of exhibit.	Depth below surface—feet.	Thickness of vein.	Produce per ton.
2116	690	10 ft. to 30 ft.	12 dwts.
2117	850	5 ft.	6 dwts.
2118	290	2 ft.	8 or 9 dwts.
2119	430	—	8 dwts.
2122	350	5 in.	1 oz.
2123	800	10 in.	7 to 8 dwts.
2124	700	8 ft.	—
2125	450	1 ft.	1 oz. 2 dwts. 13 grs.
2128	110	3 ft.	11 dwts.
2129	170	6 ft.	13 dwts.
2130	240	4 in. to 8 in.	8 dwts. 9 grs.
2132	65	½ in. to 6 in.	9 ozs. 5 dwts.
2133	30	2 ft.	17 dwts.
2134	20	18 in.	13 dwts.
2135	170	4 in. to 8 in.	3 ozs.
2136	170	4 to 8 in.	3 ozs.
2139	150	4 to 6 in.	1 oz. 1 dwt. 4 grs.
2140	160	2 ft.	1 oz. 3 dwts. 8 grs.
2141	60	4 in. to 6 in.	4 ozs.
2142	65	4 to 6 in.	4 ozs. 1 dwt. 5 grs.
2143	100	6 ft.	17 dwts.
2144	140	1 in.	3 ozs. 5 dwts. 12 grs.
2145	145	4 in. to 8 in.	1 oz. 14 dwts.

The following refers to the Castlemaine mining district:—

2146	460	15 in.	10 dwts.
2147	326	4 to 17 in.	9 dwts.
2148	50	20 ft.	4 dwts.
2149	200	9 in.	1½ oz.
2150	230	6 ft.	1½ oz.
2151	165	70 ft.	5 dwts.
2152	80	5 ft.	1 oz. 1 dwt.
2153	100	15 in.	1 oz. 10 dwts.
2155	22	4 in.	3 dwts.
2156	250	6 ft.	6 dwts.
2160	380	6 in.	7 dwts.
2161	150	1 ft.	3 dwts.
2162	140	4 in.	1 oz. 10 dwts.
2163	110	5 ft.	1 oz.
2164	110	15 in.	3 ozs.
2165	80	14 in.	1 oz. 10 dwts.
2166	300	6 to 9 in.	3 ozs. 7 dwts.
2167	40 to 60	8 ft. to 9 ft.	6 dwts.

The following refers to the Ballarat mining district:—

2168	228	14 ft.	2 ozs. 15 dwts. 7 grs.
2169	300	12 ft.	6 dwts.
2170	517	40 ft.	5 dwts.
2171	517	2 ft. 6 in.	5 dwts.
2172	790	14 ft.	7 dwts.
2173	690	4 ft.	6 dwts.
2174	890	5 ft.	5 to 6 dwts.
2175	890	68 ft.	3 dwts.
2176	990	20 ft.	13 dwts.
2177	1040	12 ft.	14 dwts.
2178	1000	20 ft.	13 dwts.
2179	260	15 ft.	4 dwts. 5·09 grs.
2180	220	5 ft.	4 dwts. 5·09 grs.
2181	220	2 ft. 6 in.	4 dwts. 5·09 grs.
2183	200	10 ft.	2 dwts.
2184	300	10 ft.	18 dwts.
2185	160	8 ft.	4 dwts.
2186	200	1 ft.	10 dwts.
2187	104	15 in.	10 dwts.
2188	70	15 in.	15 dwts.
2189	100	6 in.	2 ozs.
2190	120	2 ft.	1 oz.
2191	80	4 ft.	5 dwts.
2192	130	6 ft.	5 dwts.
2193	160	12 ft.	10 dwts.
2194	85	8 ft.	7 dwts.
2195	750	1 ft.	3 ozs.
2196	700	1 ft.	3 ozs.
2197	600	6 in.	1 oz.
2198	100	10 in.	1 oz. 10 dwts.
2199	400	10 in.	1 oz. 10 dwts.
2200	400	4 in.	12 dwts.
2201	60	3 ft.	10 dwts.
2202	260	8 ft.	9 dwts.
2203	300	7 ft.	10 dwts.
2204	731	10 ft.	12 dwts.
2205	240	3 ft.	7 dwts.
2206	545	3 ft.	7 dwts.
2207	700	6 ft.	14 dwts.
2208	200	17 in.	1 oz.
2209	200	19 in.	18 dwts.
2210	250	6 in.	12 dwts.
2211	135	12 in.	1 oz. 12 dwts.

From the Beechworth mining district we have the following results:—

2212	100	3 ft.	3 ozs.
2213	100	3 ft.	2 ozs.
2214	100	20 in.	1 oz. 10 dwts.
2216	240	10 ft.	10 dwts.
2218	30	18 in.	2½ ozs.
2219	200	2 ft.	10 dwts.
2220	200	1 ft.	3 ozs.
2221	110	3 ft.	15 dwts.
2222	420	2½ ft.	1 oz.
2223	90	18 in.	18 dwts.
2224	80	2 ft.	15 dwts.
2225	310	18 in.	2½ ozs.
2226	90	3 ft.	9 dwts.
2227	70	18 in.	2 ozs.
2228	110	1 ft.	1 oz.
2229	150	2 ft.	1 oz. 10 dwts.
2230	400	6 ft.	10½ dwts.
2231	175	2 ft.	10 dwts.
2232	10	12 ft.	6 dwts.
2233	400	4 ft.	2 ozs.
2234	150	6 ft.	1½ oz.
2235	90	7 ft.	2½ ozs.
2236	230	4 ft.	1½ oz.
2237	120	2 ft.	8 dwts.
2238	250	6 in.	13 ozs.
2239	150	7 ft.	1 oz.
2240	180	3 ft.	4 dwts.
2241	160	18 in.	2 oz. 3 dwts.
2242	60	3 ft.	1 oz.
2243	30	4 in.	17 dwts.
2244	100	18 in.	1 oz. 10 dwts.
2245	160	2 ft.	2 ozs.
2246	180	2 ft.	18 dwts.
2247	140	2 ft.	2 ozs.
2248	300	6 ft.	12 dwts.
2249	300	4 ft.	8 dwts.
2250	100	—	5 ozs.
2251	240	—	13 dwts.
2252	200	—	3 ozs.
2253	175	—	14 dwts.
2255	106	4 in.	5 ozs.
2256	180	18 in.	10 dwts.
2257	140	2 ft.	2 ozs.
2258	60	2 ft.	40 ozs.
2259	100	10 ft.	4 dwts.
2260	203	3 ft.	10 dwts.
2261	70	2 ft.	3 ozs.
2262	3	6 in.	17 dwts.
2263	170	6 in.	4 ozs.
2264	20	2 ft. 6 in.	5 ozs.
2265	60	—	1 oz.

From the Gippsland mining district we have six quartz specimens exhibited, taken from as many mines, giving 1 oz. 10 dwts., 8 dwts., 3 ozs., 1 oz., 15 dwts., and 10 dwts. respectively per ton of quartz raised, and the thickness of the reefs were in., 9 in., 7 in., 6 in., 9 in., and 2 ft. 3 in. respectively. These exhibits are numbered from 2266 to 2271 respectively. From the Maryborough mining district there are eleven specimens exhibited, representing auriferous wash dirt and cement. The exhibits are numbered from 2272 to 2282 inclusive. These mines have yielded from 3½ dwts. to 1 oz. per ton of quartz raised. No. 2279 was taken from the Gladstone Gold Mining Company's mine, which has yielded 11,000*l.* in dividends. The specimen referred to, numbered 2125, was taken from the Great Extended Hustler's Gold Mining Company's mine, which produced up to June, 1877, 177,947 tons of quartz, yielding 200.752 ozs. of gold, and has paid 553,700*l.* in dividends. From the Sandhurst mining district there are 29 exhibits, numbered from 2287 to 2295, yielding from 2 dwts. to 2 ozs. per ton. The Castlemaine mining district exhibit 20 specimens, ranging from 12 grs. to 1 oz. per ton. From the Ballarat mining district there are 23 exhibits, the produce of which ranges from 1½ dwt. to 2 ozs. 8 dwts. per ton of wash-dirt. From the Beechworth mining district there are 7 exhibits of wash-dirt, which has produced from ¼ to 10 dwts., and as much as 15 ozs. of gold per ton.

It has been estimated that about one-third of the entire area of the colony is aurifeorous, which would give 29,366 square miles, but a very small portion of that area has been explored. The area actually worked is still less. Certain theoretical geologists have frequently stated that gold could only be found down to a certain depth, which they undertook to define. Such notions, however, have long since been exploded by practical results, which have been profitably realised. No foregone scientific conclusions can determine a deep level line below which gold cannot be found. The sources from which gold has been obtained are numerous—it has been found in veins traversing granite, in diorite, in granite itself, and in the Silurian claystone, in sandstone, in silicates, in veins of carbonate of lime, oxide of manganese, and in carbonate of manganese. It has been procured from the Silurian, Mesozoic, Miocene, and the Pliocene system of rocks. It is now a recognised fact that gold mining at great depths is quite as remunerative, if not more so in many cases, than it was nearer the surface. A shaft at Clunes, 400 feet deep, yielded as much as 12 dwts. 8 grs. per ton, and in the Stawell, at the Magdala Mine, which is over 1700 ft. in depth. There are also others ranging from 1000 to 1420 ft. deep. The deep levels of some of these mines have produced as much as 3 ozs. per ton.

There are seven mining districts in Victoria—*i.e.*, Ballarat, Beechworth, Sandhurst, Maryborough, Castlemaine, Ararat, and Gippsland. The number of quartz reefs proved to be auriferous in 1876 was 3307, from which were raised 587,291 ozs. of gold, being at an average rate of 10 dwts. 13 grs. per ton of quartz, the total value being 2,349,164*l.* The extent of auriferous alluvial and quartz land worked on was 1134 square miles, leaving 28,232 square miles yet to be worked and explored. The estimate value of the gold claims and land held under gold mining leases was 5,745,590*l.* The estimated quantity of gold taken from alluvial workings was 346,933 ozs. The total yield from all sources in 1876 was 934,224 ozs., which at 4*l.* per oz. would be worth 3,736,896*l.* During the last 11 years, from 1865 to 1876, the smallest return was 1,095,787 ozs., of the value of 4,383,148*l.* The largest return was in the year 1868, being 1,657,498 ozs., of the value of 6,629,992*l.* In 1866 there were 70,794 miners employed on the various gold fields of the colony, and in 1876 there were 41,010, showing a falling off of 29,784. Many of these, however, have turned their attention to agriculture, but the yield of gold per man has nevertheless increased. Thus in 1873 the average per man was 93*l.* 16s. 2d.; 1874, 99*l.* 8s. 3d.; 1875, 104*l.* 4s. 4d.; and in 1876 it was about 110*l.*

The machinery employed on the gold fields in 1876 was as follows:—Alluvial workings employing steam-engines to the number of 289, of an aggregate horse power of 7858. There were 1143 puddling machines, 7 buddles, 210 whims, 245 whips or pulleys, 15,321 sluices, 36 hydraulic hoses, 591 pumps, 216 water wheels, 166 quicksilver and other cradles, 448 stamp heads, 16 boring machines, 792 quartz mining steam engines, of an aggregate power of 16,089 horse, 66 crushing machines driven by other power than steam, 6356 stamp heads crushing quartz and other veins, 8 other machines for winding and washing purposes, and many others of minor importance. The approximate value of all the mining plant for the year 1876 was 1,989,500*l.* At the end of 1876 the Government had made 18 leases for antimony, 1 for galena, 10 for coal, 1 for lignite, 2 for copper, 1 for flagging, 1 for lignite, 2 for silver, 1 for silver and copper, 1 for slate, 1 for ironstone, 1 for red ochre, 1 for tin and iron, 8 for tin and ores of tin, altogether making 51 leases, covering an area of 9912 acres. The value of the minerals other than gold, raised in Victoria from the year 1851 to 1875, were—Silver, 14,617*l.*; tin, 333,870*l.*; copper, 8331*l.*; antimony, 104,865*l.*; lead, 4700*l.*; iron, 2101*l.*; coal, 8233*l.*; lignite, 2172*l.*; kaolin, 7444*l.*; flagging, 37,961*l.*; slate, 940*l.*; magnesite, 12*l.*; diamonds, 107*l.*; sapphirs, 575*l.*—total, 525,928*l.* From these figures we have sufficient evidence to prove that there are plenty of other minerals in the colony other than gold, and that none of those mentioned have been much more than experimented upon, their full development awaiting further capital and perseverance. The exhibits in the Victoria Section, numbered from 2372 to 2388, are those of crushed quartz, pyrites, crystalline arsenic, and raw pyrites; some of these yielded 3 ozs. of gold per ton. Those numbered from 2389 to 2399 represent tin ore, stream tin, copper ore, green carbonates of copper, copper and iron ore; one of these yielded 5 ozs. of gold per ton. Exhibits from 2400 to 2415 represent magnetic, arsenical, and copper pyrites, native copper, sulphide of antimony, oxide of antimony, and galena and pyrites. The last of these gives an analysis of—Lead, 20·20; iron, 30·10; zinc, 3·25; copper, 0·95; sulphur, 41·00; silica and gold and silver, 4·50: together equal to 100 per cent. The proportion of gold was 3 ozs. to 1 ton, and of silver 4 ozs. 15 dwts. to a ton. 2416 and 2417 are specimens of galena; 2418, brown iron ore, giving an assay 50·4 per cent. of iron, and was obtained from the Lal Lal Iron Company's mine, Lal Lal; 2419 is a specimen obtained from the same company's works; 2420 and 2421 are specimens of brown iron ore, containing 30·82 per cent. of iron, and 5·90 per cent. of silica (the deposit is about 30 ft. in thickness); 2422 and 2433 are also specimens of brown iron ore; 2424 is a specimen of clay iron ore, yielding by analysis 51·8 per cent. of iron; 2425 and 2426 are other specimens of iron ore; 2427, 2428, and 2429 are specimens of coal, the latter being taken from the Western Port Coal Mining Company's pit. The seam is about 31 in. thick. An analysis of 2427 gives—Moisture, 3·10; volatile matter, 32·48; fixed carbon, 61·54; ash, 2·88; together amounting to 100. 2430 and 2431 are specimens of brown coal, lignite, from the Victoria Brown Coal Company's mine at Lal Lal. The first bed is 114 ft. in thickness, and beneath this bed there is a seam of clay 5 ft. thick, and then occurs a second bed of brown coal 8 ft. in thickness. An analysis of five samples give the following elements:—

	1.	2.	3.	4.	5.
Fixed carbon	29·3	27·9	26·7	38·5	39·0
Volatile matter	20·7	22·1	23·3	20·0	20·4
Hygroscopic water	48·7	48·7	48·7	40·0	40·0
Ash	1·3	1·3	1·3	1·5	0·6
	100·00	100·00	100·00	100·00	100·00

2431 is a sample of brown lignite, containing by analysis the following elements:—Water, 23·6; volatile hydrocarbons, 38·3; fixed carbon, 26·2; ash, 12·9: together equal to 100·00. These seams range from 1 ft. 7 in. to 4 ft. 4 in. in thickness. No 2432 is also a sample of black lignite, and contains the following elements:—Water, 27·72; volatile matter, 15·53; carbon, 7·08; ash, 49·67: together equal to 100·00. This seam has been penetrated to a depth of 15 ft. without finding its bottom. Nos. 2433 to 2442 consist of black marble, recent limestone, roofing slate, flag, and slate flag, basalt, potter's clay, and infusorial earth. No. 2444 is very curious, being a geological specimen, cemented together in the form of a pyramid, consisting of specimens of gold, silver, copper, tin, antimony, galena, agate, malachite, yellow chalcedony, crystals, cinnabar, and quartz, all found in the Dunolly district with the exception of the tin, which is from New South Wales, and the copper from Queensland. Exhibit numbered 2445 is a block of coal weighing 8 cwts., obtained at a mine about 60 miles from Melbourne. The exhibits numbered 2447 and 2448 represent infusorial earth and molybdnum. No. 2452 is an exhibit of bolts, nuts, and screws. From 2454 to 2462 we have exhibits of mineral india-rubber, lignite, sulphide of antimony, metallic star antimony, lead ore, iron ores, iron, and infusorial earth. The exhibit number 2465 is a block of coal about ½ ton weight.

Under class 44 we have exhibits of products of the cultivation of forests, and of the trades appertaining thereto. The latter are numbered 2467, 2468, 2469, and 2470. The former are numbered from 2471 to 2748. Specimens of paper, manufactured from various materials, are numbered from 2749 to 2794. Other specimens of manufactures are numbered from 2795 to 2803. Specimens of Victorian timber are numbered from 2804 to 2840. Specimens of natural history are numbered from 2841 to 2866.

Food products are numbered from 2867 to 2927. Chemical products are numbered from 2922 c to 2981. Manufactures of leathers and skins are numbered from 2982 to 3017A. The exhibit 3018 is that of a plan of the underground works of the Band of Hope and Albion Consols Mine, Ballarat, with statistics showing the extent of the operations in that mine and their results; 3019 is a cross section of the Pandora Company's shaft, Garden Gulley Reef, Sandhurst; 3020 is a longitudinal section of the mine situated at the Lower Alma, Maryborough; 3020A is a new invented chaff cutter; 3022 consists of a group of articles, brass work for engineers. There are several other exhibits under the item Processes used in various works referring to various machines and instruments, all of great interest as showing the capabilities of Victoria. A collection of seed and grain are exhibited, and numbered from 3039 to 3140.

Under the head of Fruits there are many exhibits, numbered from 3177A to 3446. Then comes a series of condiments, stimulants, sugar, confectionary, fermented drinks, and also useful and noxious insects, together with flowers and ornamental plants, with seeds of forest trees, flowers, shrubs, and ferns.

On the whole, the Victoria Section will be found to be one of the most attractive in the whole Exhibition, and we cannot but conclude that it will certainly have an immense influence on many of those visiting Paris.

VISIT OF THE NORTH OF ENGLAND INSTITUTE OF MINING AND MECHANICAL ENGINEERS TO FRANCE.

The first of the three days to be devoted to visiting collieries and coke ovens in the district was spent in inspecting the works of the Aniche Company. This company is one of the oldest in France, having been established as far back as the year 1773. The area of the concession is very large, as it extends over a district ten miles in length by five in width. The company have no less than seven pits actually at work, four are temporarily idle or used for ventilation, and two more are in course of sinking. The production by this company is continually and rapidly increasing, and has risen from 107,583 tons in 1850 to 613,760 tons in 1875. The average wage of hewers is 3s. 8d. a day of eight hours, and, in addition, they get coal, medical attendance, and education for their children. They pay a nominal rent for their cottages, which are well built, roomy, and well ventilated. The company has spent 832,000*l.*, of which the shareholders have been called upon to pay only 92,000*l.*, all the rest having been defrayed out of the revenue.

The visitors left their hotels at seven o'clock in the morning, and proceeded first to the Gayaut pit and coke ovens, situated about two miles to the north of Douai. The first sight which struck Englishmen as a novelty was the appearance of women and girls working along with the men at the bank or mouth of the pit. No females are employed below ground in France, but in the adjoining country of Belgium a large number—many of them being very young girls—are employed in the workings themselves. The visitors could not fail to be struck in the next place with the appearance of cleanliness, order, and economy presented not only by the colliery houses but also by the pit itself. Thrift and economy characterise the French people, and will here utilise what in England is too often thrown away. Here are four washing apparatus for cleaning the small coal, three being on the Berad and the fourth on the Coppée system. There are 56 coke ovens on the Coppée system, producing 112 tons a day, the time of burning the coal being 24 hours; and 112 ovens on the Belgian system, which is a modification of the Coppée in being of larger dimensions, and the producing result being 130 tons a day, but requiridg 48 hours for completing the process. The furnaces are charged from a small aperture in the top, and the oven is emptied by a ram actuated by a locomotive steam-engine. Water is used for cooling the coke when drawn from the ovens, and the waste heat from the ovens is applied to steam boilers.

The visitors next proceeded to the Bernicourt Pit, which is about ¼ mile distant. The pit was sunk by the Kinder-Chaudron process, after an attempt to sink a shaft by the ordinary means had been abandoned, owing to the impossibility to get through the water-bearing strata. The same system has now been adopted at Whitburn, where a similar attempt by the ordinary methods had also failed, after the expenditure of a colossal amount of capital. The depth of the Bernicourt Pit is 355 yards, and the depth of cast-iron tubing is 100 yards. The diameter is 11 ft. There is a horizontal engine with two cylinders 30 in. in diameter, 5½ ft. stroke, with variable expansion, on the Sulzer-Martin patent; and flat hemp ropes 9 ft. 12 in. wide at one end, and 6 ft. 10 in. at the other, and 1⅛ in. thick; the average weight is 15 lbs. per yard. The pit head frame is 52 ft. high, and made of wood; the pulleys are of wrought and cast-iron, 10 ft. diameter. The cages are of wood, and weigh 1 ton 4 cwt. each. The weight of the tubs is 4 cwts. each, and their capacity is 8 cwt. each. The same company have a pit in course of sinking 2 miles to the east; after visiting this new winning the party returned to Douai to breakfast, and afterwards proceeded by special train to Soumain, where there is a machine, the finest, we believe, in the world, for making compressed fuel. This is a manufacture which is almost exclusively confined to France; at any rate, it is one in which the French excel, and is another instance of their care and economy. The coal from which the compressed fuel is made is entirely duff or refuse, such as has been wasted by the thousand upon thousands of tons in the North of England, and is still allowed to remain in the pit or at the pit heap in many cases, and in the case of the strike of the pitmen at Eldon Colliery, near Bishop Auckland a fortnight ago, the merits of the dispute turned solely upon the price to be paid for throwing back the small coal, so that, lef in the pit, it might be out of the way of the workings. The process of manufacture here is first by washing the coal, and then adding a quantity of pitch; the two are heated together and pressed, and the fuel comes out in the shape of a long horizontal column, which is cut into blocks by hand as it travels along an endless band, and is delivered ready for packing into railway trucks along-

side. The factory at Soumain uses 70,000 tons of small coal, and about 5000 tons of pitch per annum, and the produce is sold at about 18 fr. a ton. It is used in the French Navy; and France itself takes all the company can produce for its own consumption. It is highly spoken of as a fuel, and possesses the advantage of maintaining its properties when exposed to the weather. It has been stacked for six months at a time in the yard of the factory without undergoing deterioration. It is very largely used upon the French railways also, and can be seen stacked at almost every station. Since the coal famine in the North of England, and the utilisation of small and duff for coking purposes, the waste at the household collieries has almost ceased, but it still goes on to a great extent at the steam collieries, especially in Northumberland; and it would seem well worth the consideration if the proprietors whether or not they could take a lesson in this matter from the French, who manage it most successfully.

Another shaft, the Renaissance, belonging to the same company, was visited. It is used only for carrying the men to and from their work, and for ventilation. It has a depth of 385 yards, with a diameter of 18 ft. There is a fan of the Lemielle system, with a height of 22 ft. and a diameter of 14 ft. The quantity of air circulating in the upcast shaft is about 22,000 cubic feet per minute.

The visitors also went by special train to Denain, where within the last three or four years large works have been established for the manufacture of steel on the Siemen's principle. The iron ore is brought exclusively from Spain and Algiers, principally the former, and the works were established here on account of the proximity of coal and the comparative cheapness of labour. The works are well laid out, and the engine-house especially elicited the admiration of the visitors. The place is said to be commercially successful, and must already have proved a formidable rival to Middlesborough.

The members were on Thursday the guests of the Anzin Mining Company, who, through their directors and managers, conducted them over the whole of their extensive royalty. The company is the oldest and most successful in France. It was established in the year 1857, and the extent of the royalty is very nearly 60,000 acres, and more than 18 miles long from east to west, and on an average more than six miles broad.

The English engineers first visited the Chaband Latour pit, where they were received by M. de Quillacq, one of the doctors, M. de Marsilly, the chief of the works, and several other of the principal officials, and by them were conducted over the colliery and the pit village connected with it. It is at the extremity of the royalty, where the seams come to the surface, and close to the Belgium frontier. Here, as at their other collieries, the company have erected cottages, schools, and churches for their workpeople, the cost of these erections being no less than 8,000,000 of francs. The education given to the children is free, the parents finding only the necessary school books and materials. The men pay from five to six francs a month for their houses, the price varying according to the locality. The accommodation consists of four rooms, two on the ground floor and two above, with very often a cellar underneath. The houses are roomy and healthy, and all showed cleanliness, neatness, and comfort; there is also a garden attached to each house. The education given in the schools seemed very rudimentary, but it was curious to observe even here the difference that exists between French and English manners, the rule of contrary being observed. The questions on division put upon the black board had the division on the right instead of on the left, as we have in England, and in this and other matters there are examples to be taken from our neighbours. The boys are taught in school the use of the rifle as part of their school exercises, so that the nation is brought up to arms from its infancy. There is no Miners' Union such as exists in England for the purpose of exacting terms from the employers, and strikes and difficulties of that description are unknown. The men have, however, a large and flourishing co-operative society, from the stores of which they obtain their supplies of clothing and provisions. Every workman of the company is obliged to be a member, and payment is made once a fortninght—that is, when the pitmen receive their pay. The profits of the co-operative society are 125,000 francs, or about 10 per cent. per year. There is a reserve fund of 200,000 frs., and 80,000 frs. worth of stock in the possession of the shareholders. The profits are about 10 per cent., and are divided amongst the members, who can if they choose allow the profits to remain in the hands of the company, and receive interest at the rate of 5 per cent. per annum.

The workmen are also supplied with medical attendance for themselves and their families, and with coals. The latter are economised, as is everything in France. The fire-grate or stove is placed in the middle of the room, and with an infinitely less quantity of coal gives an immensely greater quantity of available heat than is the case with the type of fire seen in the houses of the pitmen in Northumberland and Durham. This may seem a small matter, but in reality it is not. The value of the coals supplied to each miner in Durham and Northumberland is estimated, probably under-estimated, at 5*l.* per annum; this sum, if there be 200 men employed, as is very often the case at a colliery, means no less than 1000*l.* a year to the owners, so that a reduction of cost down to the French standard would in all cases be a great desideratum, and would in many cases make all the difference between profit and loss. The fact, however, seems to be that in England coals are too cheap; were they dearer they would be better appreciated, and we would not hear of the scandal to economy of coals being "thrown back" in the workings, of heaps going to waste at bank, and of collieries being worked, as in the Midland Counties, for the sake of such coal as can be lifted, the remainder being left in the pit to be crushed to powder by the superincumbent strata, and in all probability never made available for the use of man.

The visitors were afterwards conveyed to the Thiers pit, which is situated at the lowest dip of the basin, and named, of course, after the illustrious statesman, who, as well as being a historian and statesman, was in his time the chief promoter of these works. The workshops of M. Quillacq, a celebrated French engineer at Anzin, were also visited, and here the party were entertained to an elegant *dejeuner* at the hotel of the directors of the Anzin Company. The hotel is a spacious and elegant country house, at which the directors spend a portion of time every year. The health and prosperity of the English engineers, and the union of France and England, was proposed by M. de Marsilly, the principal official of the company, and the toast was responded to by Mr. W. Cochrane, who spoke of the kindness and generosity with which the members of the Institute had been received. The party afterwards visited the coke ovens, on the Coppée system, at Haveluy, the Renard Pit, and the workshops of M. Cail and Co., at Denain.

The members left Douai on Friday morning by special train for Lens to view the mines of Courrieres, Lieven, and Bulby-Grenay and the Harnes shipping wharf. They first visited the wharf and Courrieres Mines, belonging to one of the recently formed companies, its commencement dating no further back than 1852, but its production has in that time immensely developed. The company has a royalty of 11,000 acres, and in 1856 began working. There are five pits now at work, and a sixth is in course of sinking. The whole series of coal formations are to be found in the royalty. There are 38 seams; 6 give closely burning anthracite, containing from 9 to 10 per cent. of volatile matter; 12 seams are bituminous, and contain from 20 to 30 per cent. of volatile matter. The 38 seams give a total thickness of 105 ft. of pure coal. The output has been doubled in less than 10 years. The capital of the company is quoted at 346,400*l.* The number of workmen underground is 1800, and at the surface 466; the wages of the hewers are 3s. 8d. a day; and of all descriptions of workmen, 41*l.* 15s. 2d. a year; the average production per hewer is 242 tons. In addition to their wages, the workmen receive education for their children free, and a church is also provided by the company. Houses for the workmen are also provided by the company; they are well built, roomy, and comfortable, and contain two rooms upstairs and two down, and each has a piece of garden ground. The occupants pay two, three, or four francs a month rent, according to situation; medical attendance is also provided. The owners have regard to the amusement and recreation of the men, and have provided billiard rooms, which are open at all times. Many of the coals produced by the company are shipped by an admirably simple plan at the wharf at Harnes, upon barges in a canal belonging to the company, and which after a distance of three miles joins a public canal of the country. The coals are put into boxes at the pit, and brought to the wharf upon trolleys, from which a derrick lifts them and deposits them at the bottom of the barge without breakage. The next colliery visited was No. 4 of the Courrieres Company; this is a new winning, and coal has hardly began to be drawn. The seam is the thickest in the Pas de Calais, being no less than 10 ft., and the company have laid down plant for drawing 600 tons a day. The Lievin, whose collieries the engineers also visited, is a new company, formed in 1858, with a royalty of 5½ miles long, and about 1 mile broad. There are three winding pits, giving an output as follows:—1860, 4068 tons; 1865, 24,272; 1870, 80,457; and 1875, 158,921 tons. All the seams at present being worked give bituminous coal. The workmen here get better wages than at any of the other mines in France, but otherwise do not receive any other advantages. The hewers earn 4s. 3½d. a day, and the annual production of each is 202 tons. The average wages, on the whole, of the company's works amount to 51*l.* 12s. a year. The sinking of another pit is just completed.

After breakfasting at Lens, the visitors proceeded to the collieries of the Bulby-Grenay Company, formed in January, 1853, with a royalty of six miles in length and four in breadth. Fifty seams have been proved, giving a thickness of 48 yards of pure coal; here also there has been a very rapid development of the output, which from 27,704 tons in 1855 rose to 288,696 tons in 1875. The average yearly wage of the men was 61*l.* 4s. 9d. in 1875, and the annual production of each hewer was 172 tons. The statistics of the company show a continuous increase of wages since 1865, with a continuous decrease in the amount of work. This was the last of the French mines visited, and in the evening the members proceeded to Paris, where M. Quillacq, of Anzin, one of the most celebrated engineers of the Continent, explained to them his system of construction.

— *Newcastle Daily Journal.*

Meetings of Public Companies.

WHEAL GRENVILLE MINING COMPANY.

A general meeting of shareholders was held at the offices of the company, Union-court, Old Broad-street, yesterday (Friday),

Mr. R. W. GOOLD in the chair.

Mr. R. MITCHELL (the secretary) read the notice calling the meeting.

The following report from Capt. Hodge was also read:—

June 13.—Goold's Shaft: This shaft is sunk about 3 fms. below the 150, on the old lode, and we calculate to reach the junction of lodes in another 2 fms. sinking, provided the lodes continue their dip as now. Judging from the nature and productiveness of the old lode, and also from the droppers falling down the great lode, we feel confident that our next level will open out a more productive lode than has hitherto been seen in this mine. We have twelve men in the said shaft who are now employed cutting trip-plat, which will be finished this week, when sinking will be resumed. The 150 west end, on the old lode, has been communicated with the 150 east, on the flat-lode, which has well ventilated the latter level, and enabled us to bring back a good drop of water to Goold's engine. The 140 fm. level east end, on the flat lode, has improved—present value, 8*l.* per fathom, and likely to further improve. The lode in the 140 west end is nipped up; it is yielding, however, good stones of tin. The 130 east end, on the old lodge, is yielding saving work for tinstone.—Western Shaft: We have drained the 160 fm. level and cleaned up the shaft. The flat lode, so far as can be seen, is yielding some good stones of tin. We intend to cut a trip-plat here in the most productive part of the lode, when we will report the value of the same. The 160 east end is worth 7*l.* per fathom. The 150 east end is worth 6*l.* per fathom; we expect this end to improve soon. The lode gone down in the level above, just before the said end, is worth 15*l.* per fathom. The 140 east end is worth 7*l.* per fathom. The 130 west end is worth fully 8*l.* per fathom—a very kindly lode indeed.

We have eight stopes at work, which are worth in the aggregate 80*l.* per fm. The tribute pitches are not looking so well as hitherto.—Surface Work: Since the last general meeting we have completed our two north axles, which are now working very well indeed. The new south axle is ready to be placed on the wood horses, which will be got to work as soon as we can get the round buddles ready. During the last three months we have put in three new buddles, and during the next three months we intend to put in other eight buddles. We shall also extend our dressing yard. The calciner-house is finished, with flues, &c., and the stack is in a forward state. We have done much surface water during the past three months, and must continue to do so as our returns increase. We have sold the computed quantity of tin—50 tons, and calculate our next three months' sale at 65 tons. We met with an accident by the breaking of the cylinder cover of the stamping-engine, which has rather interfered with our present month's returns, however everything has been put right again. The engine at present is working very well indeed; you will observe that we are regularly increasing our returns, and if we could only get a moderate price for tin the mine would soon be brought into a paying state. The price of tin was considered very low when I took the management of this mine, but if we could get the same price now as we did then the 50 tons of tin sold would have realised 700*l.* more. We, however, do not despair, believing that we shall see a better price soon. We have every confidence in the property, feeling sure that the mine will eventually well repay the shareholders for all their outlay. Men employed, 160; boys and girls, 35: total, 245 persons—T. HODGE, J. HOSKING.

The CHAIRMAN said at the last moment it was thought advisable, seeing the work had been completed which had been authorised, that Captain Hodge should be present, in order that if the shareholders wished for any detailed information Capt. Hodge should be able to answer any questions which might be put. As no shareholder seemed desirous to put any questions, he presumed that the shareholders' confidence in the committee and Capt. Hodge was so great that they were content to leave matters in their hands, without entering into details. (Hear, hear.) He would make one or two remarks with regard to the working of the mine, and also with regard to its future prospects. There was nothing sensational or of great moment in the figures in the balance-sheet. It was satisfactory to notice, notwithstanding all the difficulties with which Capt. Hodge had had to contend (and these had been very great), he had been able to increase the sale of tin from 14 to 17 tons, and from 17 to 19 tons per month. Although this was not quite so high as was expected, yet the difference between that amount and what was expected was exceedingly small. Captain Hodge reported at the last meeting of the company that six months prior to that date he had been unable to see the 160 in the western shaft, and for two months he had been unable to get into the 150, which was due to the inefficiency of the old engine. He had for some time to contend with that difficulty, and also with another, which arose from an accident—the breaking of the cylinder of the steam-engine. Looking at these facts, it was highly satisfactory that Capt. Hodge had been enabled to accomplish what he had done. The 50 tons of tin which Capt. Hodge had promised in the last report had been obtained, and if everything went well, and if they found below the 160 what there was every reason to believe would be found there, there was every reason to hope they would return 70 tons in the next three months, and he hoped that after that they would soon arrive at the stage of returning 30 tons per month. Beyond 30 tons they could not hope to go, unless instead of turning out stuff averaging 2 or 2½ per cent. they got stuff averaging up to 3 per cent. That was not impossible, because in the neighbouring lode—the South Wheal Frances—they were averaging above 3 per cent. The stamps were sufficient to do it, and the turning power was abundantly sufficient, and there was no reason why, after the next month, they should not get beyond 30 tons of tin per month, which would not be a bad thing, even with tin at 40*l.* per ton, as it would give 1200*l.* per month. The expenses were about 3100*l.* for the next three months, so that if they got the quantity he had mentioned they might fairly hope that at the expiration of that time the Wheal Grenville would have been in the list of paying mines. The cost had been within the estimate that Capt. Hodge expected. The sum of 500*l.* had been paid to Harvey and Co. off machinery, and a considerable amount, some 700*l.*, was still due. He referred to the very handsome manner Messrs. Harvey had met the company, with regard to the mode of payment for the machinery, and the time which had been given for that purpose, and he hoped the company would now soon be able to pay them off entirely. Some time ago the committee thought it desirable to contract for a supply of coals, to extend over 12 months, in order to guard against an advance of price in the winter months; amongst others who tendered were Messrs. Harvey, whose tender, being the lowest, was accepted, the terms being that the company should pay for the coal supplied every three months, but Messrs. Harvey, in the most handsome manner, varied the terms of contract, and said they would be satisfied if payment was made once in every six months. (Cheers.) He hoped the company would have no desire and no necessity to take advantage of such an offer, but he mentioned it to show the handsome manner in which the company had been met by Messrs. Harvey. He believed that the mine was gradually emerging from the difficulties which had so long surrounded it. Captain Hodge had got 50 tons of tin in the last three months, and hoped to get 70 tons in the next three months. The work authorised at the last meeting had been done; calciners erected, and three new buddles put in. Up to a recent period Capt. Hodge was bothered by water in the western shaft, but by an arrangement of pumps and pipes he had managed to bring the water back from that shaft through the 150, which had been communicated with the new shaft; therefore, the directors hoped that no more mishaps would occur, and that they were entering upon an altogether new phase in the history of Wheal Grenville. If no mishaps occurred in the next three months it was not likely that the estimated quantity of ore would be lessened. The prospect of increased price looked more hopeful than for months past, and his impression was that immediately peace was insured (and there were some symptoms of it) the metal trade would revive, and there would be an increase of price, especially in tin and copper, and if they remembered that every advance of 3*l.* per ton would add to Wheal Grenville 1000*l.* a year at the rate of 30 tons per month he thought they had reason to congratulate themselves that they were on the eve of better times, and that they would reap the advantage of the outlay which the shareholders had authorised the committee to make during the past 16 months. (Cheers.) He moved the reception and adoption of the report and accounts.

Mr. RAWLINGS seconded the resolution, and bore testimony to the ability and straightforwardness of Captain Hodge.

The resolution was put and carried.

The CHAIRMAN said the next business was the making of a call. The money previously paid had been judiciously expended, and he believed the mine would turn out to be permanently valuable. The estimated expenditure during the next three months was 3100*l.*, and there was owing 1300*l.*, making 4400*l.*, against which they hoped to have 70 tons, which would yield about 40*l.* per ton, or about 3000*l.*, leaving 1300*l.* or 1400*l.* to be paid. They could not well get on comfortably during the next three months with a less call than 5s. per share, and, therefore, he moved that a call of 5s. per share be made, a discount of 5 per cent. to be allowed to all shareholders paying on or before July 5 next.

Mr. BELLINGHAM seconded the resolution, and said he visited the mine a short time since, and was exceedingly pleased with the new machinery, and that the mine promised well for the future.

The resolution was put and carried.

Mr. WADDINGTON thought the Chairman had underrated the probable richness of the ore, as in the neighbouring mine he had seen excellent specimens of ore, averaging much above 3 per cent.

The CHAIRMAN then announced that a special meeting will shortly be held to confirm the forfeiture, or otherwise, of certain shares on which the calls had not been paid.

On the motion of Mr. RAWLINGS, a cordial vote of thanks was passed to the Chairman and directors, and the meeting broke up.

WHEAL UNY MINING COMPANY.

A general meeting of shareholders was held at the company's offices, Austinfriars, on Thursday,

Mr. R. MCCALLAN in the chair.

Mr. J. HICKEY (the secretary) read the notice convening the meeting, and the minutes of the preceding one, which were confirmed. The subjoined report of the agents, together with the statement of accounts, showing a loss of 127*l.* 2s. on the four months' working, were submitted:—

June 11.—The lode in the back of the 60, west of incline shaft, is worth 9*l.* per fathom. We are sinking a winze in the 120, east of King's, on the south part of the lode; the deepest point is worth 7*l.* per fathom. A stope in the back of this level is worth 6*l.* per fathom. In the 130 east we have cut through the lode, and find the south part is worth 10*l.* per fathom. We hope to communicate the winze in the bottom of the 130 east with the 140 in a few days. Two stopes in the back of the 140 are worth 8*l.* and 10*l.* per fathom respectively. A cross cut is being driven close to the 140 end east, with the view to intersect the south part of the lode. The 140 end, west of incline shaft, carries low-grade tinstone. The 150 end, west of this shaft, has recently passed through a cross-course which has disordered the lode. The lode in the end is now worth 6*l.* per fathom. The stope in the back of this level is worth 12*l.* per fathom, and a good lode standing whole in the bottom of the 150. The 150 end, east of King's, is letting out water freely. The lode in the end has a promising appearance, and is worth 7*l.* per fathom. A stope behind this end in the back of the 150 is worth 10*l.* per fathom. The 160, east of Goodinge's shaft, although poor at present, is not unlikely to improve as we extend east. Hind's engine-shaft is sunk nearly 11 fms. below the 160; the lode is improving, and is worth 15*l.* per fathom for the length of the shaft. We purpose to sink a fathom or two deeper before commencing to drive east and west. The 160 end west is suspended for the time, and the men set to rise in the back with the view to communicate with the bottom of the 150. As soon as this is holed it will improve the ventilation, and open out good tin ground. No. 2 rise in the back of the 160 west is worth 8*l.* per fathom. There are two stopes in the back of the 160 west worth 9*l.* and 12*l.* per fathom respectively. Owing to the continually depressed state of the tin market we are obliged to suspend the breaking of low quality tinstone. The mine, on the whole, is looking well, and in no former period of its history has so much tin been produced in the time, nor has the price been so low as at present. A very moderate rise in the price of the metal would soon enable us to give good profits.—W. RICH, MATTHEW ROGERS.

The CHAIRMAN remarked that they might consider this rather a satisfactory position compared with that presented at the date of the last meeting. Their total expenditure in the four months was 5443*l.*, and they had sold 5310*l.* worth of tin. The total loss was but 127*l.* 2s., and if tin were only 2*l.* or 3*l.* per ton higher they would realise a good profit.

Mr. WALTER PIKE said that only 15s. per ton more in the price of tin would have enabled them to pay cost, so that such a rise as the Chairman had referred to would place them in an excellent position.

Mr. RAWLINGS considered that the appearance of the mine was all that they could wish, and with anything like a price for tin there would be a satisfactory dividend for the shareholders.

Mr. PIKE remarked that the present balance of loss was quite trifling, and only three or four years since when South Condurrow was paying excellent dividends the quantity of tin sold per month was really not larger than they were selling at the present moment at Wheal Uny. It ought also to be taken into consideration that this four months' cost was heavy; the current four months would, he believed, be some hundreds of pounds less.

Mr. HICKEY said that at the present time they were so nearly paying cost that they could go on without a call, and he hoped before they met again the price of tin would have so improved as to enable them to show a better account altogether.

Upon the proposition of the CHAIRMAN, seconded by Mr. RAWLINGS, the report and accounts were unanimously received and adopted; and on the proposition of Mr. RAWLINGS, seconded by Mr. PIKE, thanks were voted to the Chairman, and the proceedings terminated.

ARUBA GOLD MINING COMPANY.

The fifth ordinary general meeting of shareholders was held at the offices of the company, Gresham House, yesterday,

Mr. JNO. WIDDECOMBE in the chair.

The notice calling the meeting was read by Mr. ARCHIBALD MACKENZIE (the Secretary).

The CHAIRMAN said he would proceed to read the report of the directors, and would then be happy to answer any question which any shareholder might wish to put. The report was as follows:—

The directors beg to submit to the shareholders the audited accounts of the company up to Dec. 31, 1877. At this meeting, which is held in accordance with the Articles of Association of the company, the directors have but little to report to the shareholders. The shareholders will, doubtless, remember that, with their unanimous approval, arrangements were made in December last for resuming gold mining operations. The directors are able to report that the whole of the capital stipulated for has been subscribed and paid. Sufficient time has not yet elapsed to enable your directors to report any practical result of the recommencement of operations, but they are enabled to state for the information of the shareholders that the boilers, machinery, &c., have been repaired, and that an experimental trial has shown that they will be effective for the future operations of the company. The directors trust that at the next general meeting they may have a favourable report to give to the shareholders. Regarding the phosphates, in view of negociations pending in relation to that mineral, any further reference to that subject now is, in the opinion of the directors, inexpedient. It is requisite that two directors should, in compliance with the Articles of Association of the company, retire from office at this meeting, and it is proposed, in the absence from England of the other directors of the company, that Mr. Joseph Valentine Smedley and Mr. John Widdecombe shall be the two directors so retiring. These gentlemen retire accordingly, and, being eligible, offer themselves for re-election. The remuneration of the auditor for the past year should be now fixed by the meeting, and an auditor for the present year should be appointed, and his remuneration also fixed.

The CHAIRMAN, in conclusion, moved the adoption of the report and accounts.

Mr. ZOHRAB seconded the resolution, which was put and carried.

Mr. ZOHRAB then proposed that the remuneration of the auditors for the year 1877 should be 50 guineas.——Mr. GREEN seconded the resolution, which was put and carried.

Mr. ZOHRAB then proposed that Mr. James Ford be appointed auditor, with a remuneration of 50 guineas for the year.——Mr. GREEN seconded the resolution, which was put and carried.

The CHAIRMAN said the next business was the re-election of two directors, and Dr. Sewell, who was present by proxy, proposed that Mr. J. V. Smedley and Mr. J. Whittaker, be re-elected directors of the company.——Mr. MEADOWS TAYLOR seconded the resolution, which was put to the meeting and carried.

On the motion of Mr. MEADOWS TAYLOR, a vote of thanks was passed to the Chairman, and the meeting then broke up.

ECLIPSE GOLD MINING AND QUARTZ CRUSHING COMPANY.

A general meeting of shareholders and contributories was held at Finsbury Circus, on Wednesday,—Mr. F. R. BLUETT in the chair.

The usual preliminaries having been disposed of, the subjoined report of the liquidators (Messrs. F. R. Bluett and J. H. Taylor) was submitted:—

In calling you together this day we have to report that, on assuming office as liquidators, we found matters were in a very entangled state as regards the affairs of the company. With reference to the liabilities in California we could get at no statement, inasmuch as no accounts had been furnished for some time past from the mines, and as no claims have been made we are advised that we need not, having no funds to distribute, advertise for any. The property in California has, we believe, been confiscated, and is past redemption. As the debenture holders have a mortgage thereon, it will be for them, we are advised, to deal with it. According to the bank account in San Francisco, it would appear that cheques, amounting to over 4000*l.*, have been drawn by Messrs. Endey, Hulbert, and Nelson, but how the proceeds have departed we are unable to state. With reference to the cheques drawn by Mr. Hulbert, that gentleman has been called upon to give a statement of his acts in this respect, but no satisfactory accounts have been rendered, and our solicitor advises us to abandon further action against him, as we are without funds to carry on the suit. According to the bank-book, there would appear to be an overdrawn account of 349*l.* 11s. 3d.; this, however, has been caused by the debiting of an unpaid bill of 350*l.*, drawn by Mr. Hulbert in favour of the company, but we are informed that the bank has arranged the transaction with Mr. Hulbert. The liability of the company on loans and debentures exceeds 7600*l.*, 1200*l.* of which two of the directors have, we learn, had to pay personally. There is also due for rent and salaries 56*l.* 5s. The overdue calls amount to 1118*l.*; of this sum we have only succeeded in recovering 165*l.*—125*l.* from Mr. H. H

Nelson, and a compromise of 40*l.* on Mr. Willett's debt. We have also recovered 12*l.* 10*s.* on an unpaid cheque. The remaining calls are considered bad. The costs incurred in the petition to wind up compulsory amounted to 54*l.* 8*s.* 2*d.*, and the general costs to 7*l.* 8*s.* 6*d.*, making a total of 61*l.* 16*s.* 8*d.* Fortunately, the sum of 20*l.* 16*s.* 10*d.* in the hands of the company's solicitor was available towards this. The cost of winding up, inclusive of rent and office expenses, past and prospective, also accountancy, amounts to 43*l.* 9*s.* 9*d.*

I have now only to propose the following resolution, and on the same being passed terminate the winding up:—"That the report and statement of accounts presented to this meeting be received and adopted." Perhaps some gentleman on the other side of the table will second it.

Upon the proposition of Mr. BLUETT, seconded by Mr. S. J. WILDE, the resolution was passed, and the proceedings terminated.

The liquidators have now only to fulfil the ordinary requirements of the Registrar of Joint-Stock Companies and the concern will be legally dissolved and done with.

SOUTH CARADON MINING COMPANY.

At a general meeting of shareholders, held at the mine on Tuesday (Mr. J. G. Dymond in the chair), the accounts for the first, second, and third months showed a profit of 50*l.* 18*s.* 6*d.* The accounts were passed, and a credit balance of 2533*l.* 1*s.* 4*d.* carried to credit of next account. The following report was read:—

June 11.—I am pleased to say the mine is looking well, with every prospect of its continuation. I am sorry that we are unable to pay a dividend to day, but this is entirely owing to the very low price of copper ore; should it improve (of which I have no doubt) we shall be in a position again to pay dividends as usual. We venture to hope we have seen the lowest, and ere long we shall have the satisfaction of showing more profitable results.—JOHN HOLMAN.

ECHOES FROM THE MINING MARKET.

There is little if any change in the mining market from last week. A fair amount of business continues to be done in lead shares, Foreign mines have received rather more attention, owing probably to the rise in Richmond, but tin shares are scarcely so firm in tone. Of actual alterations there are few instances. In lead shares Van are a trifle weaker at 21½ to 22½, East Van at 4 to 4½. Tankerville better at 3⅞ to 4⅛, and Roman Gravels dull at 7⅞ to 8. D'Eresby Mountain keep remarkably firm in price. The mine looks as well as ever, and the works are rapidly progressing.

WHEAL GRENVILLE.—At the meeting held yesterday (Friday) a call of 5*s.* per share (1295*l.*) was made. During the quarter 50 tons of tin have been sold for 1900*l.*, giving an average of 38*l.* per ton, whilst the costs have amounted to 3468*l.* This includes 500*l.* charged on account of the new machinery. Total liabilities 1384*l.*; against assets 244*l.* The manner in which the accounts are rendered is much to be commended, and we are glad to note that the costs are charged to the 16th ult.

COLORADO UNITED.—These shares have been in exceptional demand for the last fortnight or so, and just at present the price is as high as 4⅜ to 4⅝. This is nearly as high as the quotations this time last year, but in the interval the price has been as low as 1¼. The rise has been attributable to the successful issue of the amalgamation scheme with the adjoining property.

PENSTRUTHAL.—In consequence of the announcement we were able to make last week of the better financial position of this mine shares have been in good demand, and the closing price (5*s.* to 7*s.*) shows a rise of 2*s.* per share. Of course the state of the metal market is against the mine, but with any fair improvement Penstruthal would be a mine to be looked after by careful investors. It is in a magnificent district, and is likely now to have a better trial.

FRANK MILLS.—We hear that a petition to wind up has been presented to the Stannaries Court. Some 26,000*l.* have been called up, and at one time the mine paid dividends, but of late the calls have been distressingly heavy and regular. The yield (silver lead) must be of very mixed quality, for the last sales only realised about 7*l.* 10*s.* to 8*l.* per ton. Capt. Southey's jiggers (West Chiverton pattern) have been erected, but the stuff is difficult to treat, and it is possible, if present difficulties are surmounted, that some alterations will be made.

JAMES H. CROFTS.

THE WEEK.

SATURDAY, JUNE 8.—In view of the approaching Whitsuntide holidays, very little fresh business was done, but exaggerated hopes of large holiday traffics caused a further rise of 1*l.* in Brighton, A, to 144. Anyone who bought the stock at this extravagant price could only do so for the mere pleasure of making a loss. Turkish Fives improved to 14¼; outsiders seem to think these may go still higher, but many holders are seizing the opportunity to sell. United Mexican mining shares continue in demand, and were dealt in at 3½. Of course this price hardly tempts holders who have paid over 2*l.* to sell, consequently a little buying sends up the price at once. The market for Richmonds is still firm; these shares may go higher.

MONDAY.—Bank Holiday. Markets closed.

TUESDAY.—There was some excited buying of Egyptian Unified, business in which was done at 53½, though the closing was 1*l.* lower, but still showing a rise of 3*l.* on the day. These bonds will soon show a rise of cent. per cent. from the lowest a few months back. Railways were offered. Of late there has been a little buying of Odessa Waterworks shares, the A's have now reached 6*l.*, while the B's fetch over 3*l.* In mining shares Richmonds advanced 10*s.*, to 12½; Eberhardts being flat, and 1*l.* down—6½ to 7.

WEDNESDAY.—Egyptian Unified rose 3¼ further, being now 56*l.* Railways failed to show any recovery, and ultimately closed below yesterday's price. In mines some buying went on in Colorado shares, which closed ⅜ higher (4¼ to 4½), but the market is rather a limited one. United Mexicans were offered.

THURSDAY.—Yesterday Egyptian Unified made up at 54¼, and to-day at 58. Last account it was 44, and at the mid-May settling 33½. In looking back to my notes for "The Week," I observe that on March 4 I wrote: "Egyptian Unified still dull at 37, though surely there could not be much risk in buying at anything like this figure." The rise in such a short time is almost unparalleled in the annals of the Stock Exchange. Those operating for a rise in Brighton, A, had the mortification to-day of seeing the stock carried over at 141¾, as against 143¼ yesterday. But in Turkish, 1871, there has been a rise from 47¼ to 52.

FRIDAY (*Opening*).—The extraordinary rise in Egyptian Unified is inducing realisations, and the price (55¼ to 56) shows a fall from 1¼ from last night. The Preference has receded to 72½ to 72¾, and Turkish Fives are offered at 15⅞. Brighton, A, and Chatham ordinary remain unchanged. Van shares are wanted at 22, while Great Laxey are neglected at 18. North Laxey, 3*s.* to 5*s.* Rookhope, ⅜ to ⅝. Grogwinion, 3 to 3¼. St Harmon, 1½ to 2. Wye Valley, 1½ to 2. Chapel House are rather in demand, and quoted 3½ to 3¾. South de Eresby, 1½ to 1⅝.—*Two o'Clock.*—A slight recovery in a few instances has taken place, Egyptian Unified being over 55, and the Preference 72¾. The bulk of the settlement is now completed. Eberhardt, 6¾ to 7. Richmond, 12½. East Van, 4 to 4¼. New Quebrada, 1½ to 1¾. Kapanga, ⅜ to ⅝. Flagstaff, ⅝ to ⅞. Colorado, 4⅜ to 4⅝. The Cape Copper dividend will be 17*s.* 6*d.* per share.—*Four o'Clock.*—One or two railways are tolerably firm, Chatham Preference and Caledonian, for instance, being higher than yesterday; but Egyptian stocks are flat. The Unified has now receded to 55, and the Preference to 72. Turkish Fives are down to 15¼. Buyers offer 22½ for Van. Chicago, 10*s.* to 15*s.* Chontales, 10*s.* to 12*s.* 6*d.* Great Western Colliery shares have recovered to 2½; a small profit is being made now by the company.

FERDINAND R. KIRK.

Registration of New Companies.

The following joint-stock companies have been duly registered:—

ASTON HALL COAL AND BRICK COMPANY (Limited).—Capital 31,000*l.*, in 5*l.* shares. To acquire leasehold mining land and premises at Hawarden, Flint. The subscribers are—M. J. Fielden, Reform Club, lieutenant-colonel, 40; W. H. Gladstone, M.P., Hawarden Castle, 40; Alexander Ward, C.E., Hawarden, 35; Sir J. Meek, Middlethorpe Lodge, York, 40; E. F. Knottesford Fortescue, Alveston Manor House, Stratford-on Avon, captain, 40; John Bethell, 30, Egerton-street, Chester, railway carriage agent, 3; F. J. Farnwood, Chester, merchant, 2. Colonel Fielding is the only director at present appointed.

NAKED MAN MINING COMPANY (Limited).—Capital 10,000*l.*, in 5*l.* shares. To take an assignment from T. R. Weir, and undertake the liabilities under an indenture of sub-lease of all the lands and premises, about one square mile, situate at Notre Dame Bay, Newfoundland. The subscribers (who take one share each) are—R. S. Archbold, 2, New Broad street, merchant; W. J. Bevan, 4, Oban Villas, Balham; W. R. Struse, 2, New Broad street, clerk; C. Crane, 53, Coburg-road, Old Kent-road, clerk; E. Sand, 27, Penshurst-road, South Hackney, clerk; F. Horton, Haverstock Hill, clerk; T. E. Scott, Lanar Villa, Maida Vale, clerk. The directors are—Messrs. T. R. Weir, Gresham House; J. A. Weir, 1, Crosby-square; and A. H. Berthond, 41, Threadneedle-street.

SURREY BRICK ASSOCIATION (Limited).—Capital 10,000*l.*, in 25*l.* shares. To carry on business as brickmakers. The subscribers are—B. Biggs, 3, Laurence Pountney-hill, 20; P. B. Cou, 15, Streatham-common; W. G. Foster, Pelham Villa, Streatham, 20; J. Gould, Carlisle-square, Chelsea, 20; J. G. Gould, The Yews, Acton; D. Cou, 15, Streatham-common; B. W. Biggs, Leyton, 1.

FARMERS AND GENERAL INSURANCE COMPANY (Limited).—Capital 10,000*l.*, in shares of 10*l.* and 1*l.* To carry on the business of an insurance company. The subscribers are—George Sly, Spalding, 10; John Woodward, Spalding, 10; T. Selby, Spalding, 10; J. T. Crowner, Spalding, 10; T. E. Knife, Spalding, 10; J. Keighley, Boston, 10; R. A. Pratt, Spalding, 10.

J. T. SIMPSON AND COMPANY (Limited).—Capital 10,000*l.*, in 50*l.* shares. To carry on business as cement and lime makers, and to acquire the business of Mr. J. T. Simpson, of Kingston-upon Hull. The first seven subscribers are—R. H. Ayre, High-street, Hull, 10; A. S. Ayre, 24, High-street, Hull; H. E. Ayre, Tadcaster, 5; T. Bailey, Hull, 10; F. Larard, Hull, 1; J. Pearson, Hull, 1; R. Simpson, Hull, 5.

The following report was received too late for insertion in its proper position:—

BLAEN CAELAN UNITED.—J. Pell, June 12: The engine-shaft is now down 6 fms. 3 ft. below the 20, and is temporarily suspended from the breakage of the crank; another one is ordered. In the meantime water will not be kept out continuously. The level driving on a part of the lode, west from the bottom of the winze at the 30, is driven 2 fms. 1 ft., and is a splendid lode: it is worth 25*l.* to the 30, as they may not be able to work there should the water rise in the shaft. The rise in the copper lode is producing stones of lead and beautiful copper. All surface work is pushed forward as rapidly as possible.

MANGANESE BRONZE.—Prof. Genti publishes an analysis of a specimen of manganese bronze from a Transylvania factory. It is nearly of the colour of brass, is tenacious and ductile under the hammer, and contains sulphur, manganese, copper, zinc, iron, with traces of silica, tin, and carbon. The essential ingredients are 15 parts of copper, 4 of manganese, and 1 of zinc.—*Revue Indust.*

ELECTRO METALLURGICAL APPARATUS.

In the application of magneto electric or electro-dynamic machines for electro-metallurgical purposes pure metals are transported from the anode to the cathode by the electric current. According to the invention of Mr. EMIL ANDRE, of Ehrenbreitstein, it is proposed to purify impure metals, alloys, combinations, coarse metals, intermediate produces, ores, rubbish, scrap, and to make of them pure metals, alloys, combinations, salts, haloïds, on a larger scale, the pure produces being either transported to the cathode or left at the anode or dissolved in the bath. In order to secure the success of the invention polarisation is to be avoided, and baths are to be applied which will rest constant under the influence of the electric current; and further polarisation is avoided by making use of anodes, which are dissolved under the influence of the current. The inventor has ascertained that not only metals, coal, &c., but speiss metals and haloids can be used for anodes. He states that the utmost care is necessary in respect of arsenical metals, as the workmen could be poisoned by arseniuretted hydrogen gas. Combinations by which the current is not conducted—as, for instance, metal salts—are dissolved in water, acids, or alkalis or salts, the anodes for this bath being formed by platinum, or this being too expensive by plastic coal prepared in flat plates or conical forms, the latter being moved by rotation; hereby the gas bubbles, by which polarisation would be generated, are removed, and the effect of a much larger surface of anodes generated. If at last polarisation grows the anodes are changed and rechanged after being cleaned. The cathodes are formed by plastic coal, or by the same metal, which is precipitated, or by such a metal, which is to be alloyed with the same. In the case that three or more metals in the same operation are to be disjoined an intermediate metal or other substance is applied, by which the one of the dissolved metals is precipitated before reaching the cathode, on which only the second dissolved metal is precipitated, the third metal being left at the anode.

By means of the invention two or more metals may be precipitated from the same material together, or one after the other, by the electric current. Their qualities being different, the method also must be different. Nickel, coarse metal, or speiss, or any combination of nickel, cobalt, or copper with other metals or haloïds, being the material, an acid solution is wanted if copper alone is to be precipitated; nickel is at the same time dissolved, but not precipitated. This will continue as long as the solution is not entirely saturated with nickel. The last trace of copper is precipitated by changing the anode of coarse metal or speiss first used for a coal anode. After a short time the last trace of copper is precipitated, and the bath contains pure nickel sulphate, a little acid, and a little iron. The nickel sulphate is purified by ammonia; the best process is to reheat the bath in a pan of lead, to stir the bath or to blast air into it, and to add a little ammonia, by which means the iron is deposited as hydrate of peroxide, which is removed by filtration or decantation, &c. The solution is evaporated until it becomes crystallised, and the nickel sulphate crystals are fit for sale. From this nickel sulphate pure nickel may be fabricated after the iron ore is removed, as above described, the bath containing nickel sulphate, ammonia sulphate, ammonia (or chlorides instead of sulphates), the cathodes being of coal, copper, nickel, or like substances, on which the nickel will be deposited. If anodes of coal or platinum were used the process would soon be interrupted by polarization, or the effect of the machine at least weakened. In this case the anodes are to be made of iron or zinc plates, or any other form or other metal which is dissolved under the influence of the current. Between the anodes and cathodes a single or double diaphragm is arranged, so as to separate both the solutions, and to avoid diffusion. At the anode iron sulphate or zinc sulphate is generated, which is sold after being crystallised; meanwhile nickel metal is generated at the cathode. This method is also suitable for fabricating nickel out of nickel silicate ores from New Caledonia or the Ural, which are previously dissolved in sulphuric or muriatic acid.

If copper and nickel metal are to be precipitated together, the anodes of coarse metal, speiss, &c, are put into a bath of ammonia sulphate and caustic ammonia. Both metals are precipitated on cathodes of coal or copper, &c., from which they are brushed off, washed, cleaned, and melted like an alloy, and worked like an alloy. The sulphur of coarse metal is partly transformed into sulphuric acid; therefore, from time to time ammonia is to added in proportion. The iron is removed, as above described; the speiss containing arsenic or antimonium, precaution is necessary with respect to the workmen. Nickel and copper, which are precipitated together, may be separated by magnets, nickel being magnetical, and the magnets of the machine itself may be used for this purpose. In the same manner also pure cobalt may be fabricated, or pure cobalt salt.

If two or more metals are to be precipitated separately from each other, intercalation is used, as, for instance, in the refining process, where gold, silver, copper are to be separated from each other admixtures (old coins, alloys, scrap, &c.) These impure alloys, forming the anodes, are put into a bath of sulphuric acid and water (1-10th). Between the anodes and cathodes a frame is intercalated, tightened on the sides of the vat, being itself overlaid on the broad sides with cotton stuff or a permeable diaphragm. The bath is divided into two parts, the one containing the anodes, the other the cathodes, and the frame itself is filled up between the cotton stuff or diaphragm, with granulated copper or scrap. Under the influence of the current silver and copper are dissolved at the anode, gold and other substances are left at the anode. The solution passing through the frame, silver is precipitated there by the granulated copper, the pure copper alone being precipitated at the cathode. If the granulated copper is almost covered with silver the frame is changed for a new one, or is filled up with fresh granulated copper; meanwhile the precipitated silver is washed, cleaned, and burnt in the refinery, or melted directly, or the process is repeated for the silver alone, which is completely refined if precipitated for the second time by the current. The consumption of acid is reduced by this method to a minimum, the workmen's fees are also reduced, and instead of copper sulphate, pure copper, very suitable for electric wires, is fabricated.

The intercalation may be arranged in another manner, the principle remaining the same, the cathodes are laid in an horizontal or inclined position on the bottom of the vat; in the upper part of the vat a little vat is suspended containing the anodes, and instead of a bottom a single or double diaphragm, not very permeable; between both diaphragms in the latter case some distance is left. Under the influence of the current at the anode dissolution of silver and copper is generated, as above mentioned, which at the deepest point is drawn off successively, but continuously, fresh diluted acid being added in proportion. The solution of silver and copper is conducted into another vat standing close by, but a little deeper, half filled with granulated copper, where the silver is precipitated. The copper solution, free from silver, is conducted into a third vat, standing somewhat deeper, at the cathode, where the copper is precipitated. The acid solution, free from silver and copper, is continuously drawn away to a fourth vat, standing deeper, and conducted to the anode, where silver and copper are dissolved by it, and so on.

The whole is arranged in the form of a terrace or tower, as the space to be disposed of permits or requires. The dissolution, standing between the two diaphragms is drawn off from time to time in order to avoid diffusion, and is worked together with the solution of silver and copper. At the lowest part of the terrace stand three reservoirs, No. 1 for the solution of silver and copper; No. 2 for the solution of copper, free from silver; No. 3 for the acid solution, free from silver and copper. Beneath each reservoir a pressure vat is placed, and from there the solution is again transported by compressed air into one of the three reservoirs at the top. The vats may be made of stoneware or wood (petroleum barrels); the pressure vats may be made of wood, bound with hoops, for low pressure, or of copper for higher pressure, their insides being lined with lead. The arrangement of the baths, anodes, and cathodes, and their substances may be very different for the different uses, the principle always remaining the same—the application of the electrolytic method on a large scale to the working of the above-named and similar metals, alloys, or combinations.

MOULDING AND COMPRESSING ARTIFICIAL FUEL.

For the purpose of moulding or compressing the material into blocks, Mr. THOS. GRANT, jun., of Cardiff, proposes to introduce such material (after it has been treated by any of the known methods now in use) into a hopper at the top of the machine. Beneath this hopper he places one or more horizontal tables, which by preference he makes of a circular form. These tables have in them moulds of the desired form, arranged at equal distances apart. Each mould has inside a plunger or piston, and on the face of each plunger or piston is any suitable design, mark, or lettering for the purpose of marking or stamping the block of fuel or other substance. The tables have cogs or teeth arranged all around their external circumference or rim (as in the case of a spur wheel), in order that they may be driven by a toothed pinion placed on a shaft for that purpose. Where more than one table is used, each may be driven by a separate pinion, or one pinion can be placed to drive one table, and the teeth or cogs on the said table made to gear in the teeth or cogs of the other tables, and this latter arrangement he prefers to adopt.

The material is fed into the moulds through a hopper, and as the tables revolve on their axes by the action of the toothed pinion or pinions, the moulds pass in succession under the hopper to be filled in regular rotation, and on leaving the hopper after being filled, they pass between a pressing cylinder having a ram or piston, or a lever and pressing cylinder having a ram or piston and a resistance piece, the resistance piece and cylinder being bolted together by means of two or more bolts or columns.

As each table has its own pressing gear, one bolt or column of each cylinder also acts as a carrier for one of the tables, so that the centre of the pressing ram shall have the same radius as the centres of the moulds, the two pressing arrangements being joined by a connecting rod. Immediately the centre of the mould is over or under, as the case may be (preferably the former), the ram or lever, the said ram or lever rises by the opening of the valve which lets the pressure into the cylinder, thereby giving the block the necessary pressing, and by its own force squeezing the block against the resistance piece with such force that the cylinder and resistance piece, with their attachments already described, are carried around with the table a certain distance, pulling back with them the cylinder and attachments that are on the other table, bringing it into position to press a block. When the exhaust valve opens and lets the pressure off the first cylinder, and another valve opens and allows the pressure to go into the second cylinder, which in its turn makes part of a revolution with the table, bringing back with it the first cylinder and attachments into position for pressing, and so on, as long as the machine is in motion, the pressure being let in and out of the cylinders alternately by means of a slide valve or other suitable valve or contrivance. The pressing power may be water, steam, compressed air, gas, or other power capable of effecting the required object. The block after being pressed is delivered by means of an incline, up which the pistons or plungers travel, actuated by arms and levers attached to the cylinders. An arrangement may also be attached to the cylinders from the driving shaft to move the cylinders backwards and forwards in case anything should happen to the rams or pistons, and prevent them from rising at the right moment. The blocks may also be pressed by means of an incline and resistance pieces only, the resistance pieces being connected together by means of a rod. In this case the centre columns, upon which the table revolves, will pass through the resistance piece as in the other arrangement, the other columns being dispensed with, the outside edge of the resistance piece having lugs passing under the bottom side of the table to prevent it lifting as the pressure increases. The resistance pieces are in this case moved backwards and forwards by means of a connecting rod from the driving shaft.

MECHANICAL ORE SEPARATION.—In another column of to-day's Journal is commenced the publication of a full abstract (which through the courtesy of the author we are enabled to give from the manuscript) of a valuable and elaborate treatise on Mechanical Ore Concentration and Separation, now preparing for publication, by Mr. F. M. F. CAZIN, M.E., of Bernalillo, New Mexico, U.S.A., and recording the results of his observations and experience in connection with the management of the dressing departments of various mines on the Pacific Coast. The mass of facts which Mr. Cazin has collected is very large, and there can be no question that in new districts like those in which he has been engaged the information given will prove invaluable. Every part of the subject is treated with equal care and judgment, so that when issued in the form of la luvo ∃e it wil certainly enjoy a wide circulation.

LEAD ORES.

Date.	Mines.	Tons.	Price per ton.	Purchasers.
June 8	South Darren	40	£16 4 6	Sheldon, Bush, and Co.
13	Talargoch:			
	Maesyrewddu	80	11 6 6	Walker, Parker, and Co.
	Coetia Llys	25	11 5 6	Adam Eyton.
	East Pant Du	50	9 11 6	ditto
	Rhyd Alun	12	10 3 6	Walker, Parker, and Co.
	Wagstaff	15	9 3 6	Adam Eyton.
	Prince Patrick	8	9 1 6	Walker, Parker, and Co.
	Grosvenor	5	10 0 0	Adam Eyton.
	Victor	10	9 10 0	ditto

BLENDE.

Date.	Mines.	Tons.	Price per ton.	Purchasers.
June 12	Talargoch	75	£ 3 12 0	Bagillt Smelting Co.
	ditto	75	3 9 0	ditto
	ditto	50	3 8 0	Vivian and Sons.
	ditto	25	3 8 0	Dillwyn and Co.

COPPER ORES.

Date.	Mines.	Tons.	Price per ton.	Purchasers.
June 8	South Darren	35	£ 3 0 6	Nevill, Druce, and Co.
	ditto	15	6 19 6	ditto

COPPER ORES.

Sampled May 29, and sold at Swansea, June 11.

Mines.	Tons.	Produce.	Price.	Mines.	Tons.	Produce.	Price.
Berehaven	107	8⅞	£4 19 0	Spanish	85	6½	£3 3 0
ditto	88	9	5 3 0	Betts Cove	80	6½	3 7 6
ditto	90	8¾	5 0 0	ditto	80	6½	3 7 6
ditto	90	8¼	4 19 0	Copper Ore	106	4⅝	2 8 0
ditto	81	14	8 5 6	Copper Pre	23	51⅞	31 0 0
Cavera	93	5½	2 11 0	Emily	12	13⅝	7 9 0
ditto	94	5⅛	2 12 0	Copper Ore	9	13	7 10 6
ditto	93	5⅛	2 12 0	Copper Matt	6	12⅛	5 13 6
Spanish	85	6⅜	3 9 6	Copper Reg.	12	31⅞	21 3 0

TOTAL PRODUCE.

Berehaven	436	£2400	2 6	Copper Precipitate	23	£718	0 0
Cavera	277	715	11 0	Emily	12	89	8 0
Spanish	171	566	12 0	Copper Ore	9	67	14 6
Betts Cove	160	540	0 0	Copper Matt	6	34	1 0
Copper Ore	106	254	8 0	Copper Regulus	12	253	16 0

COMPANIES BY WHOM THE ORES WERE PURCHASED.

Names.	Tons.	Amount.
Copper Miners' Company	226½	£ 1,014 1 6
P. Grenfell and Sons	98	504 14 0
Nevill, Druce, and Co.	6	34 1 0
Vivian and Sons	215	1,510 8 0
Williams, Foster, and Co.	273	1,223 10 6
Mason and Elkington	46½	118 11 6
Sweetland and Co.	184	478 8 0
Landore Copper Company	193	950 18 6
Total	1242	£ 5,834 13 0

NO SALE on June 25.

TOTALS AND AVERAGES.

	21 cwts.	Produce.	Price.	Per unit.	Standard.
Whole sale	1242	8¾	£4 14 0	11s. 9d.	£81 12 4

AMERICAN SUBSCRIBERS.—In reply to several enquiries, it may be stated that subscribers in the United States can be supplied with the *Mining Journal* post free, at the price of $8 50c. gold per annum, payable in advance, by remitting to Mr. D. Van Nostrand, publisher, and importer of scientific books, &c., Murray-street, New York; or, direct to our Office, 26 Fleet-street, E.C.

Mining Correspondence.

BRITISH MINES.

ABERDAUNANT.—S. Toy, June 12: The 15 fm. level is now driven east on the course of the lode 8 fms. 3 ft. 6 in. During the past week we have blasted down the lode 8 ft. in length and 3 ft. in width, which is of a kindly appearance, and producing a little blende, sulphur, and spots of lead, but not of sufficient quantity to value.

BAMPFYLDE.—James Juleff, June 12: In the 112 end, west of No. 4 shaft, the lode continues to look very promising, worth 10*l.* per fathom. The stopes continue at the same value as reported last week. No. 1 is worth 8*l.* per fathom; No. 2, 7*l.*; and No. 3, 10*l.* per fathom, and the back of the level, from No. 3 stope, is worth on an average 10*l.* per fathom. No change in any other part of the mine of particular notice.

BEDFORD UNITED.—R. Goldsworthy, W. Phillips, June 13: The lode in the engine shaft and different levels will be taken down and their values proved in time to give a full report next week.

BEITWS Y-COED.—H. T. Haley, June 10: The engine shaft is looking more promising than for some time past, yielding fully 25 cwts. of lead per fathom. The rise on the north branch in the 20 is suspended, having put the men to drivt a cross cut from the deep adit to the rise, which is worth quite as much as last week. The shallow and deep levels are without any material change since last week.

BLUE HILLS.—S. Bennetts, P. Bennetts, June 8: The Pink lode in the 80, east of the engine-shaft, is worth 8*l.* per fathom. The top lode in the same level east is worth 8*l.* per fathom, and in the west end 7*l.* per fathom. The north lode in the 30 east end is 2 ft. wide, saving work, and of a promising appearance, but not of much value.

BODIDRIS.—H. Hotchkiss, June 12: Easternmost Shaft: This shaft is now down 7 fms. from the surface; the old workings in the present bottom are very small, the former workers having merely taken out the lode, which is about 1 ft. wide, so that we have a quantity of ground to cut to bring the shaft to its proper size, and in doing this we find a little ore in the rock. I believe we are now near the bottom of the old workings. The men are working well, and making good progress. The stope in the bottom of the 30 is much the same as last reported on; worth 1 ton of lead per fathom. The various stopes in the back of the 45, east of shaft, are producing good stuff for the dressing-floors, and highly promising. This level driving east is without material change; the lode is about 10 in. wide, and is well charged with blende ore. The 60 cross cut south is highly promising for an early intersection of the main lode; the forebreast is strongly mixed with spar of a very congenial nature for bearing lead ore, the same being in layers of 1 in. to 2 in. thick traversing the end, and dipping southwards. The rock is becoming harder, and we have no signs of the cross-course here, but are in good settled ground.

COURT GRANGE.—James G. Green, June 12: I beg to advise you as to the pioneer points in the mine. Engine-shaft stopped owing to influx of water; shall have it cleared by to-morrow morning. We shall soon finish the draft now. The 45 east is in a splendid vugh, the sides of which are coated with splendid crystallised spar, with spots of lead and blende. The 30 east contains large quantities of blende, and is improved since last week for lead. The 14 east continues as last reported, and the winze is in a rich lode. The intermediate level has gone through the bunch of ore, and the men put to stope the back. The 14 west holds as good as last reported; stopes without change. The 14, west from Francis shaft, is still in a soft, decomposed lode, and I think we must drive a good many fathoms to get clear of this poor channel of ground. Weather very stormy for surface work.

DE BROKE.—J. Phillips, June 12: There is no particular alteration in Wilson's shaft, sinking below the 45; the lode is still strong and congenial, and yields stones of ore. The 45 and 35, east of Wilson's, are without change. The lode in the 25 east, lately resumed, looks well, and yields at present quite 2 tons of lead ore per fathom. The stope in the back of the 35 is producing 15 cwts. of lead ore per fathom. The stope east of winze, below the 25, looks very fair, and is producing 15 cwts. of lead ore per fathom. The machinery is in good order; the new wire-rope has arrived, and is at work. On Monday last we sampled 9 tons of ore.

DENBIGHSHIRE CONSOLIDATED.—R. Prince, A. Francis, June 13: I am glad to say the favourable change noticed in our last report regarding the 112 east continues.—112 West Permanent Level: Good progress has been made during the last fortnight in the extension of this level, and we think the lode will now open up, and give us good returns. In our driving east at the bottom level at Parry's the yield of ore has much improved. The two men engaged in following the lode at the bottom of the level have met with success. The progress in driving west at the 66 will be better than it has been when air pipes are fixed. We are glad to say the lode is of splendid character, from which it is reasonable to expect lasting returns. Tributers in No. 1 rise are doing well.

DUBBY SYKE.—Wm. Tallentire, June 6: We are nearly down the required distance with the shaft to meet the rise. A shot was fired to-night at the bottom of the shaft, which sent the clay, &c., down the rise, so now we shall not be long in holing. One metal hotching tub (double), stangs, &c., have arrived at the mine to-day, which will be placed and set to work very shortly.

EAST CARADON.—James Kellow, June 12: During the past month Williams's shaft has been sunk 3 ft. 10 in. below the 130 fm. level; the ground continues hard elvan. To drive the 150 cross-cut north 2 fms., by nine men, at 20*l.* per fathom; it was driven 1 fm. 5 ft. In the 90 fm. level we have two men stoping Child's lode in the back; yielding 1½ ton of ore per fm. Three tribute pitches were set, each by two men for two months, two at 15s., and the other at 13s. 4d. in 1*l.* We sampled on the 11th a parcel of ore of 50 tons, for sale on the 21st inst.

EAST CRAVEN MOOR.—David Williams, June 14: The 56, west upon Hardgate end vein, has been extended during the month 6 fms.; the vein is 5 ft. wide, and producing occasionally spots of lead ore. The 42, west upon Hardgate end vein, has been extended 14 fms. during the month, and we have communicated the same with the new shaft from surface. In the present end the vein is 4 ft. wide, and producing solid branches of lead ore, worth 16 cwts. per fathom. We have had a good course of ore in the sole of this level for the last 14 fms.

EAST VAN.—W. Williams, June 13: Tempest shaft is down to-day 9 fms. 5 ft. At the end of the 55 west we have cross-cut 9 ft. The ground is soft, and composed of shale, which at Van lies at the back of the productive ground. The ore ground has dipped under the level, so that it seems that our 55 cross-cut is just on the top of the productive ground. There are still small spots of lead to be seen in it occasionally. We are sinking the shaft with full dispatch in order to reach the 70 as soon as possible, which I am lead to believe (from the appearance of the lode in the 55) will be a very interesting point,

EAST WHEAL LOVELL.—R. Quentrall, June 12: Fatwork: We have not yet reached the lode in the 80 cross-cut north. The underlie below the 40 must be rather more than we expected, but we are driving the cross-cut as fast as possible by six men, at 6*l.* per fathom. The south part of the sett is opening out favourably. In the south shaft the lode is 2½ ft. wide, containing a little tin throughout, and the ground is very favourable. The lode in the north shaft is about 1 ft. wide, producing moderate stamping work, with some very rich stones of tin.

ELGAR.—James G. Green, June 12: The engine-shaft is down 5 fms. 6 in. below the 10; sunk during the month 2 fms. 3 ft. 6 in., and to be carried on during the ensuing month, by nine men, at the same price—12*l.* 10s. per fathom. The 10 east has been extended 2 fms. during the month, and I am pleased to be able to state that the lode has much improved in character and productiveness; now producing excellent saving stuff for the dressing-floors, the ore being very fine grained. I think it contains a good percentage of silver. Re-set to four men at 7*l.* 10s. per fathom. Machinery working well.

GAWTON COPPER.—G. Rowe, G. Rowe, jun., June 8: The drivage of the 117 is being pushed on with all possible vigour in ground good for progress. The lode in winze sinking below the 105 east is looking well; worth 30*l.* per fathom. The lode in the rise in the back of the 105 is worth 20*l.* per fathom. The lode in the 95, as also at the 82, is without change.

GLASGOW CARADON CONSOLS.—W. Taylor, W. J. Taylor, June 11: There is very little change to report in the sinking below the 90; the ground continues favourable, and every effort is being made to get the shaft down as fast as possible. In the 90 west the lode is worth about 12*l.* per fathom. The 90 east is worth from 12*l.* to 14*l.* per fathom. The winze in the bottom of the 78 is worth 12*l.* per fm. Another winze on the south lode in the bottom of this level is worth from 12*l.* to 14*l.* per fathom. No change of importance in either of the other bargains since our last report. The stopes throughout the mine continue about the same value, and turn out their usual quantities of ore. We sampled yesterday (computed) 230 tons of copper ore, which will be sold on the 20th inst.

GLENROY.—R. Rowe, June 12: The shaft is down 5 fms. below the 90; lode about 5 ft. wide, and without any change.

GORSEDD AND MERLLYN CONSOLS.—W. Edwards, June 13: The shaft is down 11 yards, and the ground is favourable for further good progress. I think the west level is about to undergo a favourable change, as there is water coming from the rock, and the direction of the lode is more in accordance with its position when it yielded so well in the upper workings.—Dressing Floor: We shall have ready on Saturday on the company's account about 20 tons of lead and 20 tons of blende, also of tributors' lead 8 tons.

GREAT HOLWAY.—June 13: Level Engine Shaft, Holway Lode: Since my report of May 28 the lode in the 80 east has further improved; there is no doubt in my mind that we shall before long have great returns from this point. Our progress has not been good this week in consequence of a breakage in the rods connected with the pumps in the shaft, but we shall have everything right to-morrow.—Roskell's Shaft: Boring machines have been tried, and seems to answer its purpose admirably, and we expect forthwith to make considerable progress in the sinking. We are proceeding with our other operations in a satisfactory manner.

GREAT WHEAL RODD.—T. F. Hosking, June 12: The lode in the adit has very much improved during the past week, the stuff from which far exceeds anything I have ever seen since we commenced operations, and turning out good saving work; the lode has also become much easier to drive in, which will enable us to open up the ground with good speed, when many fathoms of backs will be available for stoping, which might soon be taken away at a profit. We have had several parties to visit the mine during the last two days, and they have been highly pleased with the appearance of the lode and the character of the stuff that is now being brought to the surface. We have reason to be satisfied with the discoveries thus far made, and may fully rely on further improvements.

GREEN HURTH.—W. Vipond, June 7: We have cut nothing of importance yet in the south end of incline level; we have strong ridered branches coming in from the west side, but no ore in them. I think the main part of No. 1 cross vein must be laying on the west side of us at present. In driving from the rise on the new vein, west of No. 1 in limestone, it is yielding about 6 cwts. of ore per fm. The sole on the third branch, west of No. 1, continues to yield 10 cwts. of ore per fathom. The branch, east of No. 1, is yielding 8 cwts. of ore per fathom. The working in the sole of adit level is yielding 3 tons of ore per fathom; the men have been able to make better progress with this working this week. The cross-cut west from north level gives no indications of anything yet. No. 3 cross-vein north is uncommonly soft and vampy at present the whole width of the level, but it yields no ore. We have finished the delivery of a wagon of ore containing 7 tons 4 cwts.

HARWOOD.—Wm. Tallentire, June 6: Herdship Level: We make very good progress with driving north on No. 2, and there is no change to notice. The south end is without change, producing full 14 cwts. of lead ore per fathom; this vein, by its present appearance, may very shortly open out to be a good mine.

HINGSTON DOWN CONSOLS.—T. Richards, June 13: Bailey's Shaft: In the 172 east the lode continues of great promise, containing capel, quartz, mundic, and copper ore, to the value of 18*l.* per fathom. The stope in the back of the level is worth 18*l.* per fathom. In the 160, west of Nicholls's winze, the lode is very large, and promising; the part carried, 4½ ft. wide, is worth 10*l.* per fathom. We have commenced clearing the deep adit, with a view of extending it southward for intersection of the lodes in the Gunnislake (Clitters) Mine, adjoining.

KIT HILL TUNNEL.—H. Bennett, June 13: There is no alteration at any point since last reported on.

LADYWELL.—Arthur Waters, June 13: The new south shaft is 5 fms. below the deep adit; lode yielding stones of ore. The 20, south of this shaft, is opening tribute ground. The lode in the rise and stope above said level south is twitched up, and not to value. The 20, north of shaft, is opening out tribute ground. The pitches are yielding ore to pay the men fair wages, at 4*l.* 15s. per ton. We shall sample our usual quantity of 25 tons of lead ore next week.

LLAN GAN.—Capt. Michell, June 12: Engine-Shaft: In the 20, on Wright's lode, the lode in the end is looking more favourable than we have seen it since we commenced driving; it is what we call a nice orey lode for 2 ft. high in the forebreast; our drivage as yet is not sufficiently west to catch the dip of ore seen westward; the lode is becoming more solid as we get deeper. In the cross-cut south we are daily expecting to cut Smith's lode; the ground is unsettled, with branches of spar and spots of lead ore.—Wright's Shaft: The ground in the cross-cut is highly mineralised, and the indications are favourable for making lead ore. We have 3½ fms. to drive to intersect the north lode.—Old Engine Shaft: The stope in the south side of the level, west of shaft, is still worth 10 cwts. of good quality lead ore per fathom, and likely to improve, as the lode goes down, and the branches appear to be dropping together. Our tributers are making average wages. Our machinery is all in good repair, and working well, and the dressing is being pushed on by tributers. I am now consigning a parcel of good quality lead to market.

MARKE VALLEY.—W. George, J. Stenlake, June 13: There is no alteration in either the 90 or 30 ends driving west since last report. During the past week we have communicated the 10 end west with the rise in the back of the 20, which has greatly improved the ventilation in this part of the mine. All the stopes and pitches continue without change.

MONYDD GORDDU.—James G. Green, June 12: We have cross-cut 7 ft. in the 34; the ground is of a soft, flookany character. The men will now proceed to put in skipway, &c., after which driving will be pushed on with all possible speed. No other change to notice. The weather is wet and stormy, and much against surface work.

MORFA DU.—T. Mitchell, June 12: The bottom level continues to be driven in a course of bluestone (zinc). The ore-bearing part is nearly all the width of the end, and a portion of this is yielding saving work for copper. The discovery of ore at this point rather exceeded our expectations, and augurs well for the main deposit yet before us. When we cut into the large bunch we expect to cut down the stream of water flowing from the lode in the level above.

MELLANEAR.—June 12: The lode in the 40, west of rise, west of the skip-shaft, is producing a little saving work for copper ore. Gundry's shaft is still hard and spare for sinking. We have not yet seen the north wall of the lode, but the ground is getting more mineralised, and the water is increasing a little. The lode in the 90, west of Gundry's shaft, is 4 ft. wide, and is producing good stones of copper ore; this end is getting very wet, and we expect it will soon drain the level above. The lode in the 80, west of shaft, is 3 ft. wide, and worth 2½ tons of ore per fathom. The lode in the 70, west of shaft, is worth 3 tons of ore per fathom. The lode in the 60, west of shaft, is 4 ft. wide, and worth 3½ tons of ore per fathom. The winze in the bottom of this level is worth 4 tons of ore per fathom. The rise in the back of this level, west of shaft, is worth 3 tons of ore per fathom. The lode in the 50, west of shaft, is worth 2½ tons of ore per fathom. No. 2 rise in the back of this level is still worth 5 tons of ore per fathom. The lode in the 40, west of No. 1 rise, is 4 ft. wide, and worth 5 tons of ore per fathom, and the ground continues favourable for driving. The ground in the 30 cross-cut, south of shaft, is again a little better for driving. There is no change to notice in the 100, west of the skip-shaft. We are driving on some branches that are producing stones of mundic and copper ore, but so far we have no regular lode, but the ground was very similar to this in the level above. Our tribute pitches are looking quite as well as for some time past. All our surface operations are going on very well, and we shall sample on Tuesday about 540 tons of copper ore.

NEW SOUTH MERLLYN.—R. Rowlands, June 13: All our operations at present are being carried out by tributors, and the progress is good.

NEW TYLLWYD.—E. Richards, June 12: We have a strong lode in the rise above the 20 fm. level, east of engine-shaft, about 3 ft. wide, mixed with spar, clay-slate, and spots of lead ore, but not sufficiently rich to save for washing, but shows signs of further improvement. We are progressing favourably.—Adit Level: There is a very promising appearance in the winze going down on the south west branch from adit; the lode is from 3 to 4 ft. wide, full of spar, and very good ore in it, and has considerably improved since the commencement of the sinking. This stuff is worth saving for washing throughout. The sinking, however, is not going on very rapidly as the ground is hard, but comparatively free from water. It is to be feared that if the wet weather continues there will be much more water in it.

NORTH LAXEY.—R. Rowe, June 12: There is not much change to report on in the 84 end; the lode is small and flat upwards, but towards the bottom of the end is more promising, and less incline, about 1 ft. wide, and yielding good lumps of lead. This is a favourable change, and I hope it is the commencement of a steadier and better lode ahead of us. The 96 and 60 stopes are worth on an average about 12 cwts. of lead per fathom.

PANDORA.—H. Nottingham, June 13: New Lode: No. 1 stope in the 23 is now cleared of stuff, but we do not think to resume stoping here at present. In No. 2 stope, south of winze from the 13, we have not much lead to begin with at the winze, as the best lead makes south in going up; it is worth at present ½ ton of lead and 15 cwts. of blende per fathom. The side stripping in the level under the south end of this stope is worth ½ ton of lead and 1 ton of blende per fathom. In stripping this down we find an open space running along the footwall side, and going downwards, which shows the lode is wider here than at the level, if this is not a separate lode going off here. We have yet a considerable quantity of stuff in these stopes to clear before we can resume driving on the end south.—Goddard's Lode: No. 1 winze below the 23, north of shaft cross-cut, is worth 1 ton of lead and the same of blende per fathom, and more than this in the south end. The winze sinking in No. 2 run of ore, south of No. 1 shaft, has improved, now worth 2 tons of lead and 1 ton of blende per fathom. The stope in bottom of the 6 is without change; we expect shortly to hole this at the back of the 13.—Surface: We are making fair progress on the dressing-floors, and have a full supply of stuff to work on. The great difference in the quantity or proportion of lead and blende in our samplings at present arises from the fact that we have had a great quantity of blendestuff lying underground waiting to come up. Samples have been sent out for 35 tons of blende for sale on the 18th.

PANT-Y-MWYN.—Thomas Hughes, June 9: I am glad to inform you that the mine is opening out well. I have a fine sight at surface—large rocks of solid lead ore from 4 to 6 cwts. in weight; this is from the new lode at the 10, which is 6 yards north of Griffith's shaft, and is 3 yards wide, composed of yellow spar and beds of lead ore 2½ ft. thick, like beds of coal, dipping from the hanging side to the lying side of the lode; the western end is worth 100*l.* per fathom, and the eastern end 50*l.* per fathom. I have not yet commenced to stope on this lode. When we get a communication from the 10 to the 20 on this lode, and put (say) 20 men to stope, we shall be making large returns from this lode alone. We have four men driving the 10 east on old lode, which is large, and composed of clay and ore mixed throughout. We have gone through good ore for 30 yards in this level on old lode. In the 20 west the lode is very productive. We commenced sinking a sump in this level, the lode in which is rich—18 in. solid ore. We are not working in this sump at present, as we intend driving the level below, so as to let the water down, and have a rich section of ground to stope away; the lode here is 6 ft. wide, composed of spar and lead ore. The 15 east is now being driven by six men; the lode is 6 ft. wide; the present end is worth 20*l.* per fathom, and we are daily expecting most important improvement here, but as the ground is very easy to work, requiring little or no powder, with a lode worth about 2 tons per fathom good profits can be made. We are driving a cross-cut north from deep adit by four men, to cut the north lode; this cross-cut is looking well for the production of lead ore when the lode is cut. Two men are driving the cross-cut south at the deep adit towards the south and Builth lodes; in driving this cross-cut we have met with some fine strings of ore and spots of lead through the lime rock. We shall commence sinking Modlyn shaft soon, and when this shaft is sunk and levels driven therefrom at the 10 and 20 fathom levels, to meet levels driven from Griffith's shaft, we shall have a mine second to none in Wales, more especially when we have opened on the different lodes by the cross cuts. Our dressing machinery is working well. We have 40 tons of lead ore in the bin ready for sale, and about 15 tons at surface unwashed.

PARACOMBE.—C. H. Maunder, June 12: Good progress has been made at the different points of operation since I last advised you. No. 1 lode north has considerably improved for silver-lead ore, and to all appearances is very rich for silver. I believe our drivage is being continued over a very rich and lasting course of ore; 20 fms. beyond this drivage the lode is worth ½ ton of rich ore per fm. I have also a very strong opinion of No. 2 lode north, it being 6 ft. wide where it was cut through by making a road to a new building now being erected. Taking into consideration the fact that at a depth of only about 8 ft. it was found to contain rich copper and lead, this lode is certainly a very encouraging one, and if a cross-cut be driven to intersect it, I quite think we shall find it equally as productive as No. 1 lode.

PARYS MOUNTAIN.—T. Mitchell, June 12: The only change we have in the 90 south after passing through the two branches, referred to in my last, is merely a small string of rich copper ore, about ½ in. wide, crossing the forebreast. Fair progress is being made in the driving.

PATELEY BRIDGE.—C. Williams, June 13: There is no change to advise you of this week, except that the 30 east is again improving as we quit the cross-course. The mine is looking exceedingly well at all other points.

PENHALLS.—S. Bennetts, P. Vian, June 8: The 70 east end is slightly improved during the past week, and the 70 west end, on the same section of the lode, is worth 7*l.* to 8*l.* per fathom. The top lode in the 60 east end is worth 10*l.* per fathom. The 55 east is worth 7*l.* per fathom. Elsewhere there is not much change to report.

PENNANT.—June 13: Good progress is being made in the extension of our bottom levels east and west. I am glad to report to you that the lode in the 80 fathom level west is improving, and our stopes continue to do well, progress on the dressing-floors being satisfactory.

PLYNLIMMON.—J. Garland, June 13: There is not any change to notice in any part of the mine since my last. The lode in the 36 end, east of Herbert's winze, to-day presents a very kindly appearance, and is still letting out a good stream of water, which is evident proof of an open lode ahead. We have a good supply of water, and drawing and dressing are being pushed on as fast as possible. All well, samples of 25 tons of lead ore will be issued on Tuesday next.

PORT NIGEL.—J. Manley, June 12: The 40-in. cylinder Cornish pumping-engine has been delivered safely on the mine, and the house for same is near completion; this engine working 11-ft. stroke in the cylinder and 10-ft. stroke in the shaft will with the present pitwork be of ample power to keep the water under for 150 or 170 fms. in depth. In cutting a reservoir above the mine for storing water for condening we opened on a lode from 4 to 5 ft. wide, of a very promising character; this lode is about 15 fms. to the north of our present workings, and from its kindly appearance will greatly enhance the value of this already valuable property, as it can be wrought upon by cross-cuts from our present workings.

PRINCE OF WALES.—J. Andrews, June 12: The lode in the deep adit end west of Vigar's shaft is small and poor.

ROMAN GRAVELS.—Arthur Waters, June 13: The 65, south of new engine-shaft, is in a lode worth 2½ tons of lead ore per fathom. The 80, south of Mathews's winze, south of said shaft, is in a lode worth 3 tons per fathom. The 95, south of this shaft, is worth 2½ tons per fathom. The lode in the winze sinking below this level, north of shaft, is worth 3 tons per fathom. The 110, north of shaft, is in a lode worth ½ ton per fathom. The 110 south is in a wide lode, producing stones of lead ore. The stopes throughout the mine are as for some time past.

SOUTH CONDURROW.—Wm. Rich, Wm. Williams, H. Abrahalm, June 12: There is very little alteration to notice in the mine since our report of last week, other than the ground is easier for driving in the 93 end east, and the lode looks promising to improve.

SOUTH DARREN.—Henry James, June 13: The shaftmen are making fair progress with the driving of the 100 east and west from shaft; lode containing a little lead, but not enough to value. The lode in the 100 west from winze continues about the same in value as for some time past; worth 10*l.* per fathom. The 100 end east from winze is in hard ground; lode unproductive. In the 90 forebreast the lode is about 6 ft. wide, worth for lead and copper ores 34*l.* per fathom. The winze sinking below this level is worth 45*l.* per fathom. No. 1 stope in back is worth 20*l.* per fathom. No. 2 stope is worth 30*l.* per fathom. The 80 forebreast is in easy ground for driving; lode unproductive. The winze sinking below the 80 is in a very close and congenial rock for lead. No. 1 stope in back of this level is worth 20*l.* per fathom. No. 2 stope worth 8*l.* per fathom. The 40 tons of silver-lead ore and 50 tons copper ores sold on the 8th inst., realised 859*l.* 10s.

SOUTH DERESBY MOUNTAIN.—Thomas Bennetts, June 13: No. 2 lode we are sinking on is 10 ft. wide, producing splendid lead, specimens of which I have sent to the company's offices by the evening train, and I am sure everyone connected with the mine must be pleased to see such solid lumps of lead. I took them from the bottom of the shaft this morning; it is a magnificent lode. The ground in the cross-cut driving to cut No. 2 lode at a deeper point was very much eased during the past week, as we are nearing the lode. It is now a beautiful channel of ground for the production of lead ore.—No. 2 Adit: Driving on No. 1 lode is looking much the same as last week, producing some good lead.

— T. Bennetts, June 13: Telegram: Lode in shaft considerably improved, producing large lumps of solid lead. Have sent you to-day by rail box of specimens of lead which came from the bottom of shaft.

SOUTH MOLTON CONSOLS.—J. Harris, Thomas May, June 13: There is no particular change in the adit level since we last advised you, except that the killas is becoming a little more compact in its character, and the colour more favourable for the production of lead. Fair progress is being made with the drivage.

SOUTH ROMAN GRAVELS.—June 13: Shelve Deep Adit: The end north on No. 1 joint is driven 6 fms., but no improvement having taken place, we have suspended driving for the present. The end north on No. 2 branch is driven 8 fms. 2 ft.; the ground has undergone a change, and has become much harder during the past week. There are several strings of spar, some of them containing spots of ore interspersed through the end. One branch is about 3 or 4 in. wide; this carries a regular course, and appears to be the main leader. This end is set to four men, 2 fms. at 7*l.* 10s.

SOUTH TOLCARNE.—W. Rich, J. Knotwell, June 12: The lode in the 24 end west is not quite so large as it has been, and the ground stiffer for driving. The 36 end east is letting out water freely; the lode is very easy for working, and shows good indications for yielding copper.

ST. PATRICK.—Wm. Francis, June 12: The good features still continue in driving the 120 yard level north. The cross course which comes through from the old Pant-y-Go to the south is as strong in appearance as it was at those workings which proved so immensely productive, and I entertain confident hopes of shortly intersecting a similar course of ore in this driving; there is every feature to indicate this, and none by which a different result would be apprehended. The 60-yard level north, driving in the chert, progresses favourably, in good bearing chert, mixed with clay and spar.

TANKERVILLE.—Arthur Waters, June 13: Setting Report: Watson's engine-shaft being deep enough for a new level, the 206 cross cut is set to six men, to drive south to Tankerville lode, at 18*l.* per fathom. Six men to drive west of shaft, in said level, to open out for plat, at 13*l.* 10s. per fathom. No. 1 winze, below the 192, east of shaft, by six men, at 14*l.* 10s. per fathom; the lode is worth 2¼ tons per fathom. No. 2 winze, below the said level east, by six men, at 14*l.* per fathom; the lode is worth 1¼ ton per fm. The winze below the 192, west of shaft, by six men, at 14*l.* per fathom; the lode is worth 2½ tons per fathom. The 192 west by four men, at 12*l.* per fathom; the lode at present is worth ½ ton per fathom. No. 1 stope, in the 192 west, by four men, at 6*l.* per fathom, worth 1 ton per fathom. No. 2 stope, west of ditto, by four men, at 6*l.* per fathom, worth 1½ ton per fathom. No. 1 stope, in the 192 east, by four men, at 6*l.* per fathom, worth 2 tons per fathom. No. 2 stope, east of ditto, by four men, at 6*l.* per fm., worth 2 tons per fathom. The drift to go east of winze, below the 180 west, by four men, at 12*l.* per fathom; the lode is worth 1½ ton per fathom. The stope in back of the 130, west of winze, west of shaft, by four men, at 5*l.* 10s. per fathom; the lode is worth 1½ ton per fathom. The 120, west of shaft, as a pioneer level, by two men, at 9*l.* per fathom; the lode is yielding good stones of lead ore. The 92 cross-cut south, in old mine, towards side lodes, by two men, at 6*l.* per fathom. A new winze in the 62, on the south lode, by four men, at 11*l.* per fathom; the lode is worth 1½ ton per fathom.—Tribute: The pitch in the roof of the 140 west by two men, at 8*l.* per ton. The pitch in the 120 west by two men, at 6*l.* per ton. The pitch in the 100 west by two men, at 6*l.* per ton. The pitch in the 92, east of shaft, by two men, at 8*l.* per ton. The pitch in the 92 east, on the south lode, by two men, at 6*l.* per ton. The pitch in the back of the 82 west by two men, at 6*l.* per ton. The pitch in the 74, east of old shaft cross-cut, by two men, at 8*l.* per ton. The pitch in the 42, east of shaft, by two men, at 6*l.* per ton. The pitch in the 42, east of old shaft cross-cut by two men, at 6*l.* per ton. Surface work going on as usual.

TEESDALE.—John Slack, May 30: North End Forehead: Two fresh men were set on at this forehead on Saturday, May 25, and good progress has been made for the five shifts they have been on; and, although there is little or no change to report, it is fairly promising; the vein is very much twitched, though it makes good strong bouse for the grinding mill. I would not like to make any estimate as to what may be its yield per fathom until we have at least one dressing from it.—North End Vein—East Branch: The two old men were taken out of the north end stope and set on to prove the east branch of the vein, which, after four days working, has so much improved that we are reserving the most of the vein for bonse—it looks very promising. There will, however, have to be some timbering done and a hopper mouth put in before much more progress can be made. I am confident that in a few days this branch will not only be a new feature, but a payable portion of the mine. The same two men are engaged grating and washing their bouse—already in the bouse team—two hours each day while the water is plentiful.

TEMPLE.—June 12: With the exception of an additional produce of lead in No. 2 level, there is no change worth notice since the last report in any point of the underground operations. At surface we have commenced to make the watercourse round the mountain from Bryn Bras Farm to the mine. We have employed on this work 14 men, which number will be increased immediately; the position of the water-wheel and crusher has been determined upon, and the pit and foundations will be commenced at once, in order that all may be ready for the machinery as soon as it arrives on the mine. The weather has been very much against surface work during the past week, but no unnecessary delay will occur now a commencement has been made.

TOLGUS CONSOLS.—W. C. Vivian, June 13: There is a great increase of water coming out of the cross-cut in the 40 north, and we are urging on our operations to cut the lode, which is now close at hand, from which I expect great results. No other change.

TRELEIGH WOOD.—W. Goldsworthy, June 13: There is no change to notice in the mine since my report of the 4th inst., and all work is being pushed on as fast as we can.

WEST CRAVEN MOOR.—David Williams, June 14: Blackhill level has been extended during the month 6 fms. 0 ft. 6 in., and is now 32 fms. east of new Blackhill shaft; the vein in the forebreast is 6 ft. wide, composed of calc-spar, barytes, and branches of lead ore, worth 1 ton per fathom. No. 3 stope in back of level, by two men; the vein is 3 ft. wide, and worth 10 cwts. lead ore per fathom. The new Black shaft is in regular course of sinking by a full complement of hands, and is down 8 fms. 3 ft. below adit, or 38 fms. 3 ft. from surface.—New East Shaft: The 20 east upon No. 2 vein is disordered by a cross-course, and heaved a little to the south. No. 2 stope in back of level, by four men; vein 3 ft. wide, and worth 1¼ ton of lead ore per fathom. No. 1 stope in back of level, by two men; the vein is 3 ft. wide, and worth 10 cwts. of lead ore per fathom. On surface our machinery is in good working order, and we are daily carting ore to the smelting mill.

WEST CWMYSTWITH.—J. Davis, June 8: The winze in No. 2 lode is down about 2½ fathoms, and it is going down in a fine lode, worth for the portion we carry of it 15 to 18 cwts. of lead ore per cubic fathom; the lode is very open, and contains a large quantity of friable spar, intermixed with cubes of lead ore. If this lode continues to improve as greater depth is attained, and of which there are very favourable indications, it will be desirable to have an incline shaft sunk to intersect it and the other lodes, as shown on the section. The cross cut from No. 2 to No. 3 lodes is in 9 fathoms, and is in good ground for progress. I expect to intersect some offshoot from No. 3 lode here shortly. In Fleming lode we have a strong course of sulphur, but not much lead ore at present. In the north part of the sett the men have a very hard bit of ground to contend with, and progress is slow; they will soon be through this, and will get into easier ground. We have had our dressing machinery at work again, and have got everything in nice working order. Samples of a small parcel of ore will be due at the office on Wednesday next. Tracings of plans and sections will accompany this report.

WEST GODOLPHIN.—John Pope, June 12: There is no change worthy of remark since my last report. A full report will be forwarded in time for the general meeting on Tuesday next.

WEST PEEVOR.—W. T. White, June 12: Michell's engine-shaft is sunk 4½ fms. below the surface; the shaft is being carried 15½ feet long by 7 feet wide (within timber). Since its commencement the men have made very fair progress in sinking. When about 2 ft. below the surface we dug up as fine a shodestone as I have ever seen; it was highly impregnated with beautiful crystals of tin, precisely similar to those that are raised from the south lode in Wheal Peevor. Every foot we sink the ground is becoming more settled, and its character improving. I consider we now have the back of the lode; although not large, it produces stuff of a very good quality. I assayed a sample from it yesterday (being a fair average of the lode for the whole length of shaft), which made a produce of 3 qrs. of black tin to the ton of stuff; for such a shallow depth this is very rarely met with, and knowing the character and run of the tin ground in Wheal Peevor as I do, I consider this is a fine property, the situation of which is directly adjoining the western boundary of Wheal Peevor.

WEST ROSKEAR.—H. Stephens, W. Bennetts, June 13: The lode in the 12, driving west, is somewhat of less value now than last week; it contains more copper, but not so much lead, an exceedingly promising lode, in fact better than might be suspected so shallow. The surface work is progressing satisfactorily.

WEST TANKERVILLE.—Arthur Waters, June 14: To drive the 86 south of boundary shaft, set to four men, at 10*l.* per fathom; lode 3 ft. wide, yielding good stones of lead ore. The stope in the back of this level, set to four men, at 4*l.* per fathom; lode worth ½ ton of lead ore per fathom. To drive the 75 south of this shaft, set to two men, at 7*l.* per fathom; lode at present not to value. No. 1 stope, in the back of this level, to four men, at 8*l.* per fathom; lode worth 12 cwts. per fathom. No. 2 stope, in the back of this level, to four men, at 3*l.* 10s. per fathom; lode worth 12 cwts. per fathom. To rise in the back of drift on the west portion of the lode, also to stope the ends of rise, set to four men, at 5*l.* and 3*l.* per fm. respectively; lode in rise worth 1 ton per fathom. Stope in the bottom of the 63 south, to four men, at 4*l.* per fathom; lode worth 1½ ton per fathom. We shall sample 20 tons of blende next week.

WEST WHEAL TOLGUS.—June 12: The lode in the 145 end west has improved; to-day it is 4 ft. wide, and will yield 4 tons of ore per fathom. The lode in the 135 end west is 6 ft. wide, principally composed of quartz, and letting out plenty of water, with a little ore, but nothing to value. The lode in the 125 end west is 18 in. wide, with a little ore. The lode in the winze under this level is 2 ft. wide, with scarcely ore enough to value. The south lode, in the 135, west of the

cross-cut, will yield 2 tons of ore per fathom; east of the cross-cut will yield 1¼ ton of ore per fathom.—Richards' Shaft: Lode 5 ft. wide, with a little ore, scarcely enough to save. The lode in the 75 west is small and poor. There has been nothing done in the 65 since our last report, as the men have been employed in putting in a tramroad in this level.

WHEAL CREBOR.—John Andrews, June 11: The lode in the 120 east is worth 8*l.* per fathom. The lode in No. 1 stope in the back of the 120 is worth 10*l.* per fathom. The lode in No. 2 stope is worth 15*l.* per fathom. All other points are the same as reported last week.

WHEAL KITTY (St. Agnes).—S. Davey, R. Harris, June 3: New Shaft—Pryor's Lode: In the 154, driving west of the shaft, the lode is thrown south by a small crossing, in which direction we are driving. The lode in the 142, driving east of shaft, is worth for tin 7*l.* per fathom. The lode in the 142, driving west of the shaft is worth for tin 14*l.* per fathom. The lode in the rise in the back of the 142, west of shaft, is 4 ft. wide, and worth for tin 5*l.* per fathom. The lode in the 106, driving west of shaft, is worth for tin 4*l.* per fathom. The lode in the 94, driving west of shaft, is worth for tin 8*l.* perfathom. The lode in the 65, driving west of shaft, is 3 ft. wide, and worth for tin 7*l.* per fathom.—Old Lode: In the 100, driving west of the engine-shaft, we have met with several small gossans, or branches, which have for the present disordered the lode. The lode in the 90, east of engine shaft, is poor.

WHEAL NEWTON.—H. Bennett, June 13: The lode in the 50, east and west of Cook's shaft, presents a very promising appearance, and we hope soon to cut a good bunch of silver at this point. All other points are without any change since last reported on.

WHEAL PEEVOR.—W. T. White, Jos. Pryor, June 8: Setting Report: The shaftmen to complete the cutting of the balance-bob pit, in the 36; certain bargain, 80*l.* The 80 to driving west, by four men, for the month, at 5*l.* 10s per fm; lode worth 13*l.* per fathom. The 70 to drive west, by four men, at 5*l.* 10s. per fathom; lode worth 20*l.* per fathom. Three stopes in the back of this level, by 12 men, at 55s. and 60s. per fathom; lode worth in each 11*l.* per fathom. The 60 to drive west, by four men, at 5*l.* per fathom; lode worth 18*l.* per fathom. Two men to drive east on a side lode in this level, about 2 fathoms behind the 60 end; this branch, or lode, is about 2½ ft. wide, worth 8*l.* per fathom. The 48 to drive west, by four men, at 5*l.* 10s. per fathom; the lode is worth about 9*l.* per fathom Four stopes in back of this level, by 14 men, at 47s. 6d. and 55s. per fathom; lode worth respectively 10*l.* per fathom. The 36 to drive west, by four men, at 4*l.* 10s. per fathom; lode worth 15*l.* per fathom. A stope in the back of this level, by four men, at 3*l.* per fathom; lode worth 12*l.* per fathom. The rise in the back of the 36, by four men, at 9*l.* per fathom (carried 12 ft. long); lode worth 20*l.* per fathom. The deep adit level to drive west of the cross-cut, by two men, at 6*l.* per fathom; lode worth 8*l.* per fathom. We also set 17 pitches on tribute, to 47 men and boys, at tributes varying from 7s. to 12s. in 1*l.* We are pleased to say the mine continues to open up well.

WHEAL PRUSSIA.—W. Tregay, June 13: Tregay's Shaft: The lode here, sinking below the 40, is producing 2 tons of black tin per fathom. In the 40 west end the lode is producing 1 ton of black tin per fathom. In the 30 west end the lode is producing 1 ton of black tin per fathom.—Stone Shaft: In the deep adit end, west of this shaft, the lode is producing 10 cwts. of black tin per fathom.—Engine Shaft: The surface water, from so much rainy weather, has impeded our progress here, also in Smethem's shaft. We intend making an effort to take up some of this surface water by draining, and then hope to proceed without hindrance.

FOREIGN MINES.

ST. JOHN DEL REY MINING COMPANY (Limited).—Advices received May 31, 1878, ex Guadiana (s.), dated Morro Velho, May 1:—

GENERAL OPERATIONS—GOLD EXTRACTED TO DATE.—The produce for the second division of April, a period of eleven days, amounts to 12,820·5 oits. = 1477 9949 ozs troy. It has been derived as follows, viz.:—

	Oits.		Tons.	Oits. per ton.
General mineral	6,030·3	from	1243 =	4·851
do Praia	1,064·6	,,	214 =	4·972
Mineral free from killas	5,128·0	,,	835 =	6·141
	12,222·9	,,	2292 =	5·333
Retreatment	597·6	,,	— =	·260
Total	12,820·5	.....	2292 =	5·593

The above low produce is due to the still large quantity of quartzose and poor mineral treated during the division.

Advices received June 14, 1878, ex Neva (s.), dated Morro Velho, May 18:—

GENERAL OPERATIONS.—The produce and profit for the month show a falling off compared to former returns. The amount of mineral treated is less by 404 tons, and the produce per ton by 0·562 oits. than that for the previous month. The smaller output of mineral is due to a lower average attendance of borers daily, consequent on the Easter holidays, which, together with that of the surface labourers, has been most irregular.

The decline in the average yield per ton is accounted for by the continued extraction of an inferior class of mineral from the upper part of the eastern reserves, where the lode is not so productive, and a reduced quantity of the quartz from the north wall of sections 255 A and B, which has now been cut through. The supply of good mineral from stopes 278 A and B has also been limited, and will continue so until the A shoot is lengthened, which now becomes necessary, as any great extraction of mineral from those two points would interfere with the passage of the kibble to the sump. The work for the lengthening thereof is fairly advanced, and will be complete in about six weeks. It may be noted that larger returns of good mineral could be obtained; but with the present proportion of pure mineral a large extraction of mixed and poor mineralised killas is desirable, so as to maintain a uniform width of excavation and a permanent system of stoping operations. The general appearance of the lode in both eastern and western sections shows no material change.

GOLD PRODUCE FOR THE MONTH OF APRIL.—The gold extracted during the above period amounts to 35,831·6 oits., equal to 4130·8006 ozs. troy. It has been derived as follows:—

	Oits.		Tons.	Oits. per ton.
From general mineral	16,774·7	from	3200 =	5·242
,, ditto Praia	2,914·2	,,	631 =	4·618
,, mineral free from killas	14,383·0	,,	2249 =	6·395
	34,071·9	,,	6080 =	5·604
Retreatment	1,759·7	,,	— =	0·289
Total	35,831·6	,,	6080 =	5·893

REDUCTION DEPARTMENT.—The total quantity of amalgam for the month 81,288 oits, the yield of gold being 44·07 per cent. The return of the mill duty and extraction per ton of mineral treated is less favourable, the general condition of the machinery causing many interruptions and heavy repairs. The new stamps east of Lyon's and various alterations to the present machinery are well advanced.

At the PRAIA a machine for the separation of the slimes from the residual sand is now in full working order, and a percussion table for the treatment of the separated coarser particles of pyrites and other mineral. The action of both machines so far is perfect, and the gold contents obtained from the concentrated sand fairly satisfactory. An extended series of experiments will have to be made ere any decided opinion can be be given as to the permanent application of these machines for general retreatment.

COST AND PROFIT.

The produce for April being ...	35,831 6 oits.		
Less loss in melting... ...	195·9 ,,		
	35,635·7 at 7s. 9d. per oit. =	£13,808	16 8
Cost		7,545	8 2½
Profit for the month of April		£ 6,263	8 5½

MINE.—Mineral raised from mine ... 6559 wagons.
Mineral quarried per borer daily ... 2·09 ,,
Average number of borers daily ... 125·12
Average number of natives daily ... 201·40

SUMP AND STOPES 278 A AND B.—The sump has been sunk 6 ft., with no alteration in the general character of the mineral body at either of the above points. The average width of pure mineral contents in the forebreast of the sump and upper stope is 21 ft.

LEVEL ABOVE SUMP.—The contracted form of the lode in the driving still continues. From the stope the supply of good mineral has been fair, with a promise of an increase when worked at a lower horizon.

EASTERN DRIVING UNDER ROOF AND STOPE, 217 C.—Owing to reduced borer force during the month the level has been under suspension. The stoping operations, still confined to the upper part of the eastern reserves, 217 C, have yielded but a limited supply of good mineral; the lode, as extension easterly is made, being of a lesser width corresponding with that passed through in the driving. As the stope is lowered there will be an increase in the output of good mineral.

217 A AND B.—The usual amount of mineral from these two sections has been fairly maintained. On the north wall side the mixed body of the lode has slightly decreased in size. At 256 A and B measures are being taken for the purpose of building a stone stull at that point.

WESTERN SECTIONS, 255 A AND B.—The stoping operations at the latter have been very extensive, particularly on the north side, where the large body of quartz, a continuation of the tooth, has been cut through. In the bottom and towards the south wall the extent of pure mineral is slightly wider. The upper part of the stope, from which a limited extraction has been made, maintains its full width of good mineral and former promising appearance.

234 B.—A large extent of the overlaying mass of quartz has been removed, exposing a continuation of the pyritic mineral met with in the lower stopes. Its general direction is towards the south wall, and with the altered bearing of the lode passed through in the western driving would indicate a continuation thereof in that direction.

THE WESTERN LEVEL.—Seven feet of ground have been passed through with little or no change for the month. Width of pure mineral contents, 4 ft.

B SHAFT.—Sinking for the month, 8 ft. 6 in.

GOLD EXTRACTED TO DATE.—The produce for the first division of May, a period of eight days, amounts to 9409 8 oits. = 1084·7967 ozs. troy. It has been derived as follows:—

	Oits.		Tons.	Oits. per ton.
General mineral	6,291·0	from	1246 =	5·049
,, ,, Praia	823·3	,,	153 =	5·381
Mineral free from killas	1,880·5	,,	312 =	6·027
	8,994·8	,,	1711 =	5·257
Retreatment	415·0	,,	— =	·242
Total	9,409 8	,,	1711 =	5·499

REDUCTION DEPARTMENT.—The Illingworth wheel, driving 12 heads and 4 arrastres, has been stopped since the 9th inst. for general repairs; the arms, segments, buckets, and backing to be replaced by new ones, it being considered unsafe in its present condition. During the above stoppage there will be no retreatment or sand. The axle of the Susannah mill, nine heads, broke on the 15th inst., and is now beyond repair, its inner part being quite rotted through.

MINE—RETURN OF DUTY FOR FOURTEEN WORKING DAYS:—
Mineral raised from the mine ... 3634 wagons.
Mineral quarried per borer per diem ... 2·01 ,,
Average number of borers daily ... 129·00
Average number of natives daily ... 212·71

No change to advise in either the western or eastern sections.

The following telegrams have been received:—

On May 24—"Produce eight days (first division of May), 9500 oits.; yield, 5·5 oits. per ton (=6·8 by old measurement). All going on well."

On May 27—"Profit for the month (April), 6200*l.*"

On June 4—"Produce twelve days (second division of May), 13,250 oits.; yield, 5·3 oits. per ton (=6·6 by old measurement).

DON PEDRO NORTH DEL REY (Gold).—Report for April: Produce from 2039 75 tons, dry weight, 3078 oits. = 1308*l.* 3s.; cost, including all general expenses, also cost of labour and materials, amounting to 333*l.* 18s. 8d., for erection of new pumping machinery, 2339*l.* 8s. 10d. As you will see, the cost is gradually decreasing, but I am sorry to say that the produce has also decreased; it is to be hoped, however, that the latter is only temporary, as you are aware all jacotinga mines are subject to sudden changes, over which no one has any control.

RICHMOND CONSOLIDATED.—Telegram from the mine at Eureka, Nevada: Week's run, $65,000, from 1046 tons of ore. Doré bars from refinery, $60,000. Stopped one day to repair machinery.

— R. Rickard, May 22: During the past week operations both in mine and smelting works have been carried on with usual regularity, and very good results. The winze below the 200 is about the same as last reported. A second winze has been started 130 ft. west of the footway; it is down 15 ft.; it was started on a small seam of ore, and in the bottom it is 3 ft. wide, very good ore; this is above the No. 4 chamber 100 ft., and virgin ground between these two points. The 400 main drift is still in hard limestone, consequently slow progress is being made. The winze below the 400 from No. 7 chamber is connected with the 500. We are now putting in a division for an ore shute and footway; as soon as this is completed we shall start stoping below the No. 7 chamber. The drift from No. 7 chamber towards the shaft is in hard ground, also the drift from shaft is very slow for progress. No. 4 chamber above the 400 is looking very well. No. 9 chamber is improved since my last. No. 5 chamber is looking better in the western end, the ore is making up towards No. 9. No. 7 chamber is opening out better than expected on the eastern end; we are extracting some very good ore from this point. On the whole the stopes and winzes are much improved since last week. The 500 cross-cut is still in very hard rock. The 600 is without change, it is being drifted on the contact of quartzite and limestone. The stope from winze above the 8·0 is now 5 ft. wide, very fair ore; we are now starting a cross-cut on the hanging wall, where we expect to find some ore. The 900 has been drifted 70 ft. through a mass of ledge matter; it is still in the same kind of ground, and looks very promising. The furnaces are in good working order, and smelting the usual quantity of ore.

SIERRA BUTTES (Gold).—Result of the working at the mines for May: Sierra Buttes Mine: Total receipts, $10,301; total California expenses, including cost of mining and milling, $20,924.—Plumas Eureka Mine: Total receipts, $42,308; total Californian expenses, including cost of mining, milling, &c., $24,197.

LONDON AND CALIFORNIA.—The clean-up at the Original Amador Mine for the month of May is estimated at $4500.

BLUE TENT.—D. T. Hughes, May 18: We have run quite steadily during the past week, and the ditch has furnished a continuous stream of water. Our powder drifts at South Yuba are drawing rapidly to a close, and will set them off sometime the coming week. The Blue Lead and Gopher are also running well, and everything working satisfactorily all round.

— June 11: The directors have received the following telegram from their manager:—"South Yuba clean up $8600."

BIRDSEYE CREEK.—G. S. Powers, May 20: Since my last there has not been much change, except in our water supply, which is daily growing less. We have been buying 300 inches from the South Yuba since the 10th instant, and I hope to be able to get through with this month without further increasing the bought head. I shall then use all of the water on Neece and West and Waloupa. We are raising shaft at the latter claim, or rather we are tunneling off at right angles with the main tunnel at present, to avoid sinking an open cut through the gim rock, and will prove much cheaper in the end. It appears that the main tunnel is at present running about 40 or 50 ft. to the east of the deep channel, which seems to be well defined by a wall rock on the east dipping rapidly towards the west. We have not succeeded yet in ascertaining to what depth the rock goes down, but judge the drop to be from 35 to 40 ft. I am encouraged to believe that the profits for this month will exceed those of last.

— June 11: The directors have this day received from their manager the following telegram:—"We have cleaned up after a run of 30 days. The gross return is $10,500. The profit is $4500."

MINERAL HILL.—Mr. Plummer, May 20: The driving of the Queen Tunnel is still suspended.—Troy Mine: The Troy winze is now 40 ft. below the bottom of the Queen tunnel; the quartz is still hard, but continuous, and, if anything, is increasing in size.—South Giant: We have completed the communication between this and the Star Mine.—Star Mine: The men are now engaged in breaking ore in the roof of this mine with greater speed and economy than heretofore. We have about 22 ft. of ground in height in this roof, all of which should contain more or less ore. We are also engaged putting in a chute between the Star Chamber and the Queen Tunnel.—Frances Mine: The branch looks poor; it is also small; slightly to the south we have some quartz in a softer limestone, and intend opening on it.

COLORADO UNITED.—The superintendent (May 18) reports that he started to stope, on May 9, from the Union Tunnel, 630 ft. from the entrance, starting at the silver ore shaft west above the level we are now driving on the lode. The mineral here is fully 6 in. in width, and looks well, and I expect to take down a considerable quantity of ore from this stope during the month.—Eighth Level (our present lowest workings): This level is looking very well indeed, with good mineral about 6 in. on breast of drift, about 240 ft. from the Terrible engine-shaft, and 260 ft. from the silver ore shaft. This level has been driven for the last 50 ft. on a good streak of ore, and as we have splendid mineral on the bottom of the seventh level for the whole of this distance it makes it now a certainty that we have a magnificent block, 80 ft. in height and 310 ft. in length, of stoping ground between these two levels. The silver ore shaft is now down 20 ft. below the seventh level, and has at the bottom a vein of a good 8 in. of the richest mineral we have in the mine—in fact it is from the lowest workings that our principal rich ore is coming from, and when you consider that the very bottom of the mine is only about 450 ft. down from the Discovery shaft I think that we may feel satisfied with the present indications and the future prospects of the company. With regard to the new properties acquired by the company the superintendent says:—In the lowest stope of the Brown (above the Tunnel level) we came across a body of ore yesterday about 2 ft. wide. I assayed a piece to day which I considered a fair average sample, and it went 142 ozs. of silver to the ton.—Oneida: This mine has at the present time about 2 ft. of mineral at the breast of the level, and this will doubtless prove to be one of the most valuable lodes belonging to the United Company.

PROVIDENCIA AND NEW ROSARIO.—Extract from Mr. V. Cumins's letter, dated May 14: Setting aside the stope in the back of San Miguel, our present works are confined to proving of the two most important points in the mine, in one of which our recent operations have developed an improvement that gives a more cheerful aspect to the prospects of the property. The improvement in the lode (in San Miguel winze) was so gradual for some 10 or 12 varas as to be scarcely apparent, but in the last 3 varas it has been clearly perceptible, and at this time we have a good payable lode for the whole width of the winze (1½ vara 4 ft. 2in.), and if we could be sure of having a length of 50 varas of the same ore a prosperous future might be guaranteed to the mine provided that no unfavourable change would take place in depth; the present depth of the winze is about 23 varas (about 64 ft.), or 13 varas below the bottom of the shaft. We purpose sinking during another two weeks, and then driving to ascertain the length of payable ore. In the eastern cross cut of the San Miguel north level there is no change; and, according to a survey made by Capt. Peter Skewis, we ought to have 5 or 6 varas further to drive. We had calculated on intersecting the lodes at about the present time, and that in the event of their being found productive the small capital at hand would have been sufficient to enable us in a short time to break away enough ore to meet all costs. The stope in the back of San Miguel is still yielding very good ore, but the quantity is less. Thirty-five cargas (about 5 tons) of ore have been dressed during the fortnight, worth 10 to 11 marcs: 219 marcs of silver sold realised about 382*l.*

EBERHARDT AND AURORA.—Capt. Drake, May 20: North Aurora Mine: Our drivings in the mine during the week have developed no material change, either in the quantity or quality of ore broken, or in the prospect of the ore continuing. Running one teaming at hauling, and last week delivered to the mill 78 tons. We probably will commence hoisting the broken ore-rock in the mine some time this week. The John Wild North to-day is not looking quite so promising. The face of the No. 1 drift from the rise is just now looking poor. To hasten the development of the improved ore found back along in the drift (and already reported) I have taken the men from the face of the drift and put them to work breaking on the ore. The men who the week before last were working in the rise are now running No. 2 drift north from rise, and last week made 9 ft. The face of this drift is not to-day looking so well as its commencement a week ago. Last Saturday I had assays made of the rock broken from the 6th to the 18th inst. inclusive, which, as you will see, are not so favourable as those obtained on the 4th inst., and given in my No. 327. The results of the assays made last Saturday are as follows:—From No. 1 drift north, $43·98, $1·56, $84·02, $6·28, $9·43, $26·70, $21·99; from No. 2 drift north, $12 56, $10·21, $4·70. $7·85; from the rise, $24·34, $37·70, $6·28. These assays show for a certainty that the ground in which we are prospecting is by no means barren. What will be opened up by further prospecting I, of course, am now unable to say. But I know not what better can be done than to push on with the work of development, and thereby ascertain more definitely than at present what may be in store for us.

PESTARENA UNITED (Gold).—June 4: District Val Toppa: In the north end of the intermediate level below Zero, on the western part of the great quartz lode, the lode is about the same, yielding 4 tons per fathom; worth 6 dwts. per ton; driving is suspended for the present, and a new winze commenced close to the end. The stopes in back behind this end have fallen off somewhat, yielding at present about 2 tons per fathom; worth 10 dwts. per ton. The stopes in back behind the south end, and south of winze from Zero level, have fallen off in value; the lode is wide, but of low quality at present; stoping is suspended here for the present, and a new stope has been commenced north of winze, where we have a fine lode; we estimate it will give fully 10 tons per fathom, and be worth 13 dwts. per ton.—No. 1 Level: In the end south the lode is producing 2 tons per fathom; worth about 6 dwts. per ton. In the end on branch in west side above No. 1 level the lode is producing 4 tons per fathom; worth 6 dwts. per ton. In the winze in No. 1 level, south of cross-cut, we have a lode yielding about 9 tons per fathom; worth 7 dwts. per ton.—No. 2 Level: In the end, south of No. 1 cross-cut east, the lode continues small. The stopes in bottom, south of No. 1 cross-cut westward, are producing 4 tons per fathom; worth 6 dwts. per ton.—Great Quartz Lode: The lode in No. 2 level, north of No. 4 cross-cut on the eastern part, is more than the width of the end; worth on an average about 5 dwts. of gold per ton. The winze north of this cross cut has been communicated to the intermediate drive north under No. 2 level, opening up a good piece of ground for stopes on this eastern part. The stopes in back of this intermediate drive north are producing 10 tons of ore per fathom; worth on an average 6 dwts. per ton. In the intermediate drive south the lode is producing 7 tons per fathom; worth 6 dwts. per ton. The stopes behind this end are producing at present 14 tons per fathom; worth 7 dwts. per ton.—No. 3 Level: The drive south of rise has been communicated to the intermediate drive north under No. 2 level opening up the ground north of the old workings.—Flat and New Lodes: In the end south on the so-called caunter branch in Zero level, the lode is producing stones of quartz, and is looking more promising than it has done for some time past.—No. 2 Level: The stopes in back on the flat lode, south of No. 4 cross-cut eastward, are producing 1½ ton per fathom; worth 8 dwts. per ton, and we hope for an improvement here. In the winze near this same cross-cut the lode is producing 4 tons per fathom; worth about 8 dwts. per ton. In the drive in north end of stope under No. 2 level, on the turn of flat lode, the lode is producing 4 tons per fathom; worth 7 dwts. per ton. The stopes in back, south of No. 1 cross-cut east, on the continuation of the flat lode in the mountain, are producing 10 tons per fathom; worth about 8 dwts. per ton.—No. 3 Level: The stopes in back, south of cross-cut on the new lode, are producing 5 tons per fathom; worth on an average 5 dwts. per ton. In No. 3 level we are putting up a rise in the roof of No. 1 cross-cut westward in search of the flat lode there; as yet stones of ore only have been met with.—No. 5 Level: In the cross-cut west we are pleased to say there has been a favourable change in the ground during the past few days.

District Pestarena: In the incline shaft the lode is yielding 4 tons per fathom, and worth as per small mill trial 17 dwts. of gold per ton. In the 100 end north the lode is small, and not to value. In the 100 end south the lode is yielding 2½ tons per fm., and worth 1 oz. 3 dwts. 5 grs. per ton. In this level a branch in the western side is yielding 1½ ton per fathom, and worth 10 dwts. 7 grs. per ton; this end bids fair for a further improvement. In the 90 end south the lode is yielding 2 tons per fathom, and worth 1 oz. 1 dwt. 7 grs. per ton. No. 1 stope in back of this level is yielding 8 tons of ore per fathom, and worth 2 ozs. 5 dwts. 4 grs. per ton, and in No. 2 stope 5 tons per fathom; a mill trial gave after the rate of 4 ozs. 10 dwts. 7 grs. per ton. In No. 3 stope we have a lode also yielding 5 tons to the fathom, and worth 4 ozs. 10 dwts. 7 grs. per ton. North of shaft at this level No. 1 stope is yielding 4 tons to the fathom, worth 1 oz. 3 dwts. 5 grs. per ton. No. 2 stope is yielding 5 tons per fm., worth 1 oz. 3 dwts. 5 grs. per ton. In the 65 in the end, south of the 65 cross cut on No. 2 lode, the lode is small, and not to value. In the 55 in the end north, driving under the old Acquavite Mine on No. 1 lode, the lode is yielding 7 tons to the fathom, worth 1 oz. 12 dwts. 6 grs. per ton. No. 1 stope in back of this level is yielding 4 tons to the fm., worth 1 oz. 1 dwt. 7 grs. of gold per ton; and No. 2 stope 4 tons per fm., worth 10 dwts. 7 grs. per ton—the latter stope is suspended for the present. In the 33 the stopes in back, north of No. 1 cross-cut on No. 2 lode, are yielding 1½ ton per fathom, worth 1 oz. 8 dwts. per ton. From this level we are rising to prove the lode, which is at present producing stones of ore, but not of much value as yet.—Acquavite Department: The stopes in the back of the old 55 are yielding 4 tons to the fathom, worth 13 dwts. per ton. The stopes in the back of the 23 are yielding 7 tons per fathom, worth 14 dwts. 20 grs. per ton. All the work connected with the adit level is progressing fairly. At surface good progress is being made on the addition to the picking-floors.

CAPE COPPER.—The Ooklep, Spectacle, and Trial Mines reports are received: Returns for April: Ooklep, 270 tons of 30 per cent.; Spectacle and Nababeep, together, about 25 tons of about 30 per cent. Progress plans to March 31 are received and can be seen at the company's office. Arrivals at Swansea, the Pathfinder and Alonzo. Arrivals at Port Nolloth, the Anne Beal. Sales of ore by public tender: 490 tons on May 22, at an average of 12s. 1¾d. per unit, realising approximately 9400*l.*, and on June 12, 490 tons, at an average of 12s. 6¼d. per unit, realising approximately 9800*l.*

VIRNEBERG COPPER.—R. K. Roskilley, June 12: Setting Report: Hadley Engine-Shaft: The 140 metre level to drive south of engine-shaft, by two men, at 75 marcs per metre; the lode in this end has a promising appearance, and yielding good stones of yellow copper ore. To stope the back of this level south of shaft, by six men, at 27 marcs per metre; the lode is worth 10*l.* per fathom. The 120 metre level to drive south of shaft, by six men, at 60 marcs per metre; the lode is worth 25*l.* per fathom for copper ore. To stope the back of this level, by nine men, at 38 marcs per metre; the lode is much improved, and worth 20*l.* per fm. for copper ore. To stope the back of this level on the footwall of the lode, by six men, at 30 marcs per metre; the lode has a better appearance than for some time past; worth 7*l.* per fm. To stope the back of the 120, north of shaft, by six men, at 38 marcs per metre; the lode at present is disordered by a slide, but judging from its appearance and character we think it will shortly improve. The 90 cross cut to drive east through the lode by six men, at 60 marcs per metre: the lode, so far as cut into, is 5 ft. wide, yielding some fine yellow copper ore. To stope the 90 metre level, north of shaft, by six men, at 16 marcs per metre; the lode is worth 10*l.* per fathom for copper ore and improving. We have six men engaged at the deep adit level cutting ground for bearers and cistern for a house water lift: this important work will be pushed on with energy, in order that no time may be lost in fixing the same. The masons are making good progress in building the engine and crusher-houses, and the same will be completed as soon as possible for the reception of the engine and crusher. We are pushing on the dressing of copper ore, and I am pleased to say the mine is improving.

WATSON BROTHERS' MINING CIRCULAR.

Ten years ago the weekly information which had previously been published for a great number of years in WATSON BROTHERS' Mining Circular was transferred to the columns of the *Mining Journal*, with the following announcement; which is now reproduced in consequence of the numerous letters and enquiries handed to them of late in reply to one which appeared in the Journal on the Clementina Mine.

WATSON BROTHERS,
MINEOWNERS, STOCK AND SHARE DEALERS, &c.
1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

The great extension of mining business, the difficulty so often complained of by country shareholders in getting accurate and disinterested information as to the state of Cornish and Foreign Mines, and of the financial and real position of mining companies generally, have induced Messrs. WATSON BROTHERS to make their Circular now published in the *Mining Journal* more extensively known, and to state—

That they issue daily to clients and others who apply for it a Price List (as supplied to most of the London and country papers), giving the closing prices of Mining Shares up to Four o'clock.

They also buy and sell shares for immediate cash or for the usual fornightly settlement in all Mines dealt in on the Mining and Stock Exchanges, at the close market prices of the day, free of all charges for commission. They deal also, on the same terms, in the Public Funds, Railways, Telegraphs, and all other Securities dealt in upon the Stock Exchange.

Having agents in all the mining districts, they are constantly getting mines inspected for their own guidance, and will also obtain special reports of any particular mine for their clients, for the inspecting agent's fee of £2 2s.

In the year 1843, when mining was almost unknown to the general public attention was first called to its advantages, when properly conducted, in the "Compendium of British Mining," commenced in 1837, and published in 1843, by Mr. WATSON, F.G.S., author of "Gleanings among Mines and Miners," "Records of Ancient Mining," "Cornish Notes" (first series, 1862), "Cornish Notes" (second series, 1863), "The Progress of Mining," with Statistics of the Mining Interest, annually for 21 years, &c., &c. In the Compendium, published in 1843, Mr. WATSON was the first to recommend the system of a "division of small risks in several mines, ensuring the success in the aggregate," and Messrs. WATSON BROTHERS have always a selected list on hand. Perhaps at no former period in the annals of mining has there been more peculiar need of honest and experienced advice in regard to mines and sharedealing than there is at present; and from the lengthened experience of Messrs. WATSON BROTHERS they are emboldened to offer, thus publicly, their best services and advice to all connected with mines and mining.

Messrs. WATSON BROTHERS are daily asked their opinion of particular mines, as well as to *recommend* mines to invest or speculate in, and they give their advice and recommend mines to the best of their judgment and ability, founded on the best practical advice they can obtain from the mining districts, but they will not be held responsible, nor subject to blame, if results do not always equal the expectations they may have held out in a property so fluctuating as mining.

CLEMENTINA.—The mine is now in fork, and as the large reservoir which has occupied so much time in completing, is now full we anticipate no further delay in underground operations. The lode in the bottom level is increasing in size, and we shall look for good returns of lead from the stopes. Owing to the expense and delay consequent on the short supply of water, and having to build a reservoir, 3 acres in extent, it was necessary a few months ago to raise additional funds, and the mine is now in 5120 shares, 1*l.* fully paid up, and an available balance of 2560*l.* Before the delays, to which we have referred, took place the prospects of the mine were such that shares were cent. per cent. premium. They are now at par to a small premium, and should be picked up.

SATURDAY, JUNE 8.—Market very quiet. D'Eresby Mountain, 80 to 100; Van, 22 to 23; Roman Gravels, 7½ to 8; D'Eresby Consols, 10 to 12; East Van, 4¼ to 4¾; Great Laxey, 18½ to 19½; Carn Brea, 40 to 42½; Dolcoath, 30 to 32½; South Condurrow, 11¼ to 11¾; South Frances, 2¾ to 3¼; Bagar, 3¾ to 4¼; Grenville, 3 to 3½; Richmond, 11½ to 12; Eberhardt, 7½ to 7¾.

MONDAY, JUNE 11.—Market closed in consequence of Bank Holiday.

TUESDAY, JUNE 11.—There is very little doing to-day, and the following are almost nominal quotations:—Carn Brea, 40 to 42½; Dolcoath, 30 to 32½; South Condurrow, 11¼ to 11¾; South Frances, 2¾ to 3¼; Tincroft, 10 to 11; Agar, 3¾ to 4¼; Grenville, 3 to 3¼; Peevor, 6¼ to 6¾; D'Eresby Mountain, 80 to 100; D'Eresby Consols, 12 to 12; East Van, 4½ to 4⅝; Great Laxey, 18½ to 19⅝; Grogwinion, 2¾ to 3¼; Leadhills, 3½ to 3¾; Roman Gravels, 7¼ to 8; Rookhope Lead, 17s. to 19s.; Tankerville, 3⅞ to 4½; Van, 22 to 23; West Chiverton, 8½ to 9½; Wye Valley, 1½ to 2; West Wye Valley, 2½ to 3; Devon Consols, 2½ to 3; Mellanear, 3½ to 3¾; Parys Mountain, 8s. to 10s.; Richmond, 12 to 12½; Eberhardt, 6¾ to 7; Javali, 7s. to 9s.

WEDNESDAY, JUNE 12.—There is very little change in the general tone of the market, and prices, therefore, are about the same as yesterday.

THURSDAY, JUNE 13.—Market continues depressed, chiefly owing to speculations in foreign stocks. Vans and Great Laxey weaker. D'Eresby Mountain, 80 to 100; D'Eresby Consols, 10 to 12; Van, 21 to 22; Great Laxey, 17½ to 18⅛; East Van, 4⅛ to 4¾; Morfa Du, 12s. 6d. to 15s.; West Chiverton, 8¾ to 9⅛; Glenroy (Lead), 15s. to 17s. 6d.; Rookhope (Lead), 17s. to 19s.; South Condurrow, 11¼ to 11¾; South Frances, 2¾ to 3¼; Carn Brea, 40 to 42½; Dolcoath, 29 to 31; Parys Mountain, 8s. to 10s.; Devon Consols, 2¼ to 3; Mellanear, 3½ to 3¾; Richmond, 12¼ to 12¾.

FRIDAY, JUNE 14.—Market continues very quiet. Van, 21½ to 22⅛; Great Laxey, 17½ to 18⅛; D'Eresby Mountain, 80 to 100; D'Eresby Consols, 10 to 12; Roman Gravels, 7½ to 8; Tankerville, 3⅞ to 4⅛; Carn Brea, 40 to 42; South Condurrow, 11¼ to 11¾; South Frances, 2¾ to 3¼; Grenville, 3 to 3¼; Agar, 3¾ to 4⅛; Morfa Du, 12s. 6d. to 17s. 6d.; Parys Mountain, 8s. to 10s.; Richmond, 12¾ to 12⅝; Eberhardt, 6½ to 7s.

HOLLOWAY'S OINTMENT AND PILLS.—Glandular swellings in the throat, neuralgia, tic doloreux, rheumatism, gout, lumbago, and other diseases affecting the glands, muscles, and nerves of sensation are permanently eradicated by this healing anti-febrile and soothing preparation. It is also a perfect remedy for all skin diseases, and every kind of superficial inflammation, which soon lose their angry and painful character under this invaluable ointment. The pills have never been administered either by hospital or private practitioner in dyspepsia or liver complaints without producing the desired result.

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(ESTABLISHED 1849.)

The Mining Market: Prices of Metals, Ores, &c.

METAL MARKET—LONDON, JUNE 14, 1878.

IRON.	£ s. d.	£ s. d.
Pig, GMB, f.o.b., Clyde..	2 9 10½	—
,, Scotch, all No. 1 ...	2 11 0	3 10 0
Bars, Welsh, f.o.b. Wales	5 0 0	5 5 0
,, ,, in London.	5 12 6	5 15 0
,, Stafford., ,, .	6 15 0	7 10 0
,, in Tyne or Tees ...	5 10 0	5 15 0
,, Swedish, London ..	9 10 0	(nom.)
Rails, Welsh, at works..	4 17 6	5 0 0
Sheets, Staff., in London	8 5 0	—
Plates, ship., in London	6 15 0	6 17 6
Hoops, Staff.	7 15 0	—
Nail rods, Staff. in Lon.	6 10 0	6 15 0
STEEL.		
English, spring	13 10 0	19 0 0
,, cast	30 0 0	40 0 0
Swedish, keg.....	14 0 0	—
,, fag. ham.	15 0 0	—
LEAD.		
English, pig, common..	16 15 0	—
,, ,, L.B.....	17 0 0	—
,, ,, W.B.	17 10 0	—
,, sheet and bar..	17 15 0	—
,, pipe.....	18 0 0	18 5 0
,, red	19 7 6	—
,, white	24 5 0	26 0 0
,, patent shot ...	21 0 0	21 5 0
Spanish	16 7 6	16 10 0
NICKEL.		
Metal, per cwt	18 0 0	20 0 0
Ore, 10 per cent. per ton.	24 0 0	26 0 0
QUICKSILVER.		
Flasks of 75 lbs., ware.	6 18 9	7 0 0
SPELTER.		
Silesian	17 12 6	17 15 0
English, Swansea	21 0 0	—
Sheet zinc	21 0 0	22 0 0

TIN.	£ s. d.	£ s. d.
English, ingot, f.o.b...	65 0 0	—
,, bars ,, ...	66 0 0	—
,, refined.....	68 0 0	—
Australian	61 10 0	—
Banca	64 0 0	—
Straits	61 10 0	—
COPPER,		
Tough cake and ingot.	68 10 0	—
Best selected	70 0 0	70 10 0
Sheets and sheathing .	73 0 0	74 0 0
Flat Bottoms	78 0 0	—
Wallaroo	73 0 0	(nom.)
Burra, or P.C.C.	70 10 0	71 0 0
Other brands	68 0 0	69 0 0
Chili bars, g.o.b.....	63 10 0	—
PHOSPHOR BRONZE.		
Bearing metal	£112 0 0	
Other alloys	£120 0 0	140 0 0
BRASS.		
Wire	7½d.	8d.
Tubes.....	7½	—
Sheets	8¼	8¾
Yel. met. sheath. & sheets.	6½	7
Nails composition.....	8¾	9

TIN-PLATES.*	per box.	
Charcoal, 1st quality ...	1 0 0	1 2 0
,, 2nd quality ...	0 18 6	1 0 0
Coke, 1st quality	0 17 0	—
,, 2nd quality	0 16 0	0 16 6
Black .....per ton	16 0 0	16 10 0
Canada, Staff. or Gla., at Liverpool	11 10 0	12 0 0
Black Taggers, 450 of 14 × 10	30 0 0	—

* At the works, 1s. to 1s. 6d. per box less for ordinary; 10s. per ton less for Canada; IX 6s. per box more than IC quoted above, and add 6s. for each X. Terne-plates 2s. per box below tin-plates of similar brands.

REMARKS.—The depression and decline in trade from which our markets have been so long suffering continue with as much severity as ever throughout the entire empire—we might have added, without much fear of contradiction, over the greater part of the world—and appear so unmistakeably marked in such an extensive and variety of ways, that there can scarcely be a commercial house in existence, either retail or wholesale and shipping, that is not suffering immensely from contraction of business and diminution of profits, and in too many instances from severe losses. No trading or industrial class can claim exemption; the reverses of fortune are general, and all are more or less affected, but especially producers, manufacturers, merchants, and agents, whose books in the aggregate could doubtless speak volumes. The condition of the labouring classes in the manufacturing districts also discloses a most lamentable and grievous state of affairs; so that, taking the present period altogether, it is one of excessive gloom and painful distress, and unusually barren—unprecedently so within the recollection of the present generation. The severity of the struggle is greatly increased and intensified by its prolongation and indefiniteness, and the difficulties hitherto have proved insurmountable.

To imagine that there can be anyone who is insensible to or unaffected by the gravity of the change is too incredible to be entertained; nevertheless, there are some who occasionally act so strangely that it would seem they are incapable of thoroughly comprehending the magnitude of the evil, but if by any possibility there still remain some who are unconvinced of its reality, or who think lightly of it, let them refer to the latest official records that have been issued by the Board of Trade, and unless they are past convincement they will find that instead of there being the slightest grounds for buoyancy there is every cause for despondency. The falling off is truly alarming, the total declared value of exports being only 16,165,075*l.*, against 17,461,139*l.* in May, 1877, or a reduction of 1,296,064*l.* Without entering into particulars, which would be detrimental to metals, as the loss on iron and steel alone is 400,000*l.*, surely this is sufficiently glaring to show the depressed state of trade, and it ought to arouse many from their self-indulgent torper to renewed exertion, and to convince them of the utter uselessness of so persistently going contrary to the stream—it is evident that the reduced prices are not sufficiently low to excite an additional demand, and lower prices must follow to give the necessary stimulus. With such a statement as the above figures exhibit we are perfectly at a loss to understand or account for the late action of speculators, for there is not a single feature of the least value that can be advanced in behalf of an upward movement in prices.

If the figures had been reversed, and there was a million and a quarter over and above that of the preceding year, and the stocks of metals were decreasing instead of increasing, then there would have been some evidence of a recovery, and the case would be totally different, but as matters stand the more sensible view to take and to base an operation upon would be lower markets, and not higher prices. The position of the leading metals, both in regard to demand and stocks, being less favourable is decidedly in favour of a downward tendency, and the probabilities, therefore, are dead against those who look for a rise. It might be thought that as last month was a very bad one this month would in some measure make up its deficiencies, but no such thing is at all likely to occur, as the interruptions occasioned by the national sports, the Bank holiday, and Whitsuntide will probably curtail business for this month; however, we certainly cannot anticipate an increase, and considering the heavy state of the markets, the time of year, and the great uncertainty surrounding the future, it would be advisable to realise without delay, for further concessions will undoubtedly have to be made before confidence will be re-established and the markets again restored to a sound, healthy, and active condition.

Our main object, but not the only one, in urging holders to effect sales whenever practicable is to avoid an undue pressure or panic hereafter, for we are rather fearful, owing to the tension being so great, that forced sales ultimately will have to be resorted to. Holders up to the present time have satisfactorily met the demands upon them for margins, but there is a limit to the means of the largest capitalists, and it would be exceedingly awkward and inconvenient to have to provide just now against a sudden drop in value, necessitating the immediate payment of further deposits. When this prospect exists the position is rendered extremely unsafe and and critical. Take copper, for instance, about three or four weeks since, with the price bordering upon 80*l.* per ton for Chili bars, what a hair-breadth's escape it was for those who were involved, and how very damaging it might have proved to them—saved, as it were, only by the skin of their teeth. So recent a warning ought not to be unheeded, and holders generally should consider what they would be able to do in such an emergency, for a return may not be so far off as some suppose.

Everything is still in an unsettled state, and nothing can be advanced while there is an absence of security. Of course every body hopes (ourselves included) for the best, but that is a poor apology for a guarantee. There have been so many disappointments arising from false and delusive hopes that it is better to take the trade as it is, and not be in too great haste to speculate. Caution is quite as necessary now as it was twelve months ago, and perhaps more so; at any rate it would be very unwise to launch out at this momentous period, with trade declining, stocks increasing, political questions of European interest undecided, Germany in a state of disquietude and alarm, Russia and Turkey impoverished by the war, the Cape trade affected by the drought and native war, and India and China still suffering from recent famines. Where, then, is the relief to come from? We cannot trace yet awhile, but time and experience will probably produce more effect than any word of caution from us, Those who have hitherto ventured, in opposition to our sterling advice, have lost their money and bought experience rarely fails to make an impression, because, no doubt, that will teach them to be more careful for the future, and serve as the best and most forcible monitor, for to be successful we must be prudent and patient.

COPPER.—This has been a dull week, but not so more than might have been expected after a wild speculation; besides, there seldom is a great deal doing at Whitsuntide. Buyers have been looking on. Sellers have been holding off. Prices have been quoted slightly lower, but there has been no business of any importance to be obtained, and sellers will probably have to make further concessions, for buyers must be satisfied of their requirements before prices advance, and being supplied it is not likely that they will pay more than they did before, if so much, and why should they? as there is no occasion for them to do so, the market being extremely inactive, and prices derive no strength from the demand, neither are stocks diminished, but quite the contrary, heavier than for many years past.

The shipping trade is just as bad as the home consumption, and where are sellers to to turn for support? To speculators, because of the Congress, and that would be a very weak crutch indeed to trust to, and one which might only deceive. The market would be much better without fictitious prices; we have had quite enough of them, as they only unsettled trade, and inflation never promotes legitimate business. But can it be possible that holders build their hopes upon speculators coming to their rescue, and so carry prices beyond the reach of consumers and shippers. That would be such an objectionable and improper wish that we will at once dismiss the idea. No; if any good is to be done in the way of improving prices it must originate from *bona fide* sources, and its genuineness will then ensure confidence, and that is what sellers should look to, and exert their utmost endeavours to accomplish. But an inducement in price must be given whenever necessary, and its advisability at the present moment is indisputable. Holders should not act the part of the dog in the manger, and withhold that which circumstances require should be surrendered. An improved demand is generally admitted to be much wanted, and the best and quickest means to promote it will always be found the most advantageous. A temporary sacrifice may be needful, and holders should not hesitate to make it, or a greater sacrifice may have to be submitted to. Unless the opportunity is afforded smelters and manufacturers to accept orders for manufactured, copper cannot get consumed, and it is the duty of every importer to meet the market.

Importers, who are looked up to as the suppliers of a market, have no right to speculate with the market, their business is to keep the trade regularly supplied, and they ought to make it a rule to realise within a reasonable time after arrivals. There would not have been the accumulations of stock, which now so heavily weigh upon our market, if this principle had been adopted, and importers would have done much better for themselves, and the trade would have been benefited. But why not begin directly and lighten the stocks, or are importers going to perpetuate their old mistake, and hold on at all costs? Because if this policy is intended to be pursued, the less risks that are taken in copper the better, for ultimately it must come out. It is not fair to monopolise an article in general use, and attempt to enhance its value by any artificial scarcity. The monopolists of Chili bars should succumb; but if they will not, than the monopoly must be left to wear itself out, and there is no doubt that holders will get tired of waiting for the demand sooner than buyers will for the reduction. But the holders of Chili bars might profit by the good example set them by the Australian companies, who have this week announced their public sales for Tuesday the 18th inst. The Wallaroo Company will offer 532 tons of cakes and 62 tons of ingots, and the Burra Company 141 tons of cakes and 144 tons of ingots. Neither of these companies have hitherto put any reserve upon the price, but have trusted entirely to the open competition amongst buyers, and they have lost nothing by this exhibition of confidence: we hope their next sales will meet with the success they deserve. There is one alteration, however, that buyers would prefer if it could possibly be arranged, and that is the fixing of an interval between the sales. To say that no further sale shall take place for one, or two, or three months causes buyers to anticipate a sale about such times, and they are rather inconvenienced if the dates are not adhered to. It would be more satisfactory to all parties to know about the date of the next sale.

Another public sale of Australian to follow the Wallaroo is announced to-day by Messrs. Vivian, Younger, and Bond, amounting to about 400 tons, chiefly of the Cobar brand, which, according to Messrs. Johnson and Mathey's assay, contains 99·60 per cent. pure copper. The Cobar brand is, perhaps, less known than the old established brands of Burra and Wallaroe, but its purity and excellence are strong recommendations in its favour, and those buyers who have not as yet given it a trial may certainly do so with the utmost confidence. All who buy Burra and Wallaroo should not leave the sale without taking some portion of Cobar. We hope the importers will follow the good example of the other Australian companies, and not hamper their brokers with any reserve price, for if they do we venture to tell them beforehand that it will not answer, especially if there is likely to be any regular supplies coming forward to this market. The copper must be sold on its own merits; and, although it may not realise its full value at the first sale, yet the owners need not be discouraged on that account, as it will soon rise to its proper level when it comes to be well distributed amongst consumers. Messrs. Vivian, Younger, and Bond are perfectly capable of taking care of the interests of their clients, and their persuasive eloquence cannot fail to secure the highest prices obtainable. At the Swansea Ticketing, on Tuesday, 1400 tons of ore were sold, at an average of 11⅛ to 11¾ for 8¾ per cent. produce. By the mail from Bombay, on the 18th ult, it is reported that copper braziers have favoured buyers at 8 per cent. Yellow metal also cheaper. By the mail from New York on the 1st inst. it is stated that the demand for manufactured copper continued on a moderate scale, manufacturers' prices remaining unchanged. The demand for ingots continues very limited, and only about 50,000 lbs. Lake have been placed since the last report.

IRON.—This week has been a blank one for the iron trade, but Whitsuntide is rarely anything else at the best of times, and when trade is bad it forms a very good excuse for keeping the works closed, but such an unfortunate state of things is much to be deplored, for the workmen must be great losers by the short hours of employment. There can be no pleasure in being forced to take holidays when there is no spare money for amusements. Idle time is frequently only productive of mischief, and the harbinger of evil habits. The depression in the iron trade does not appear to have abated in the least. Sellers endeavour to keep the markets together as well as they can, but they experience the greatest difficulty in upholding prices, and so great are the restrictions that it is hardly possible for them so do so much longer. As regards the shipping trade, it certainly is no better, and freights being advanced will not tend to improve matters. The prices in the foreign markets keep excessively low, and there is no margin to induce merchants to ship. Stocks are abundant, and it will take a long time yet before higher prices can be looked for. The tendency now is decidedly downwards, and ironmasters are wanting orders for hoops and sheets. Orders do not come for any quantity, and it is evident that the price is not yet low enough to ensure steady and permanent increase in the demand. Those who keep iron yards in various parts of England, and supply the home trade, speak anything but favourably of the state of the trade, and consider there is no ground for saying an improvement has commenced. The price of Scotch pigs for a few days did show some improvement, but it was purely speculative, and will go below what it started from. The shipments are lower again, and do not compare well with recent years. There is positively no revival, and no justification for the statement. Can it be that we who watch the trade as narrowly as a cat does a mouse be unacquainted with any decided turn in the market? It is not only the knowledge which comes within our own province, but the advices and reports taken in combination from every place in and out of the kingdom, and there is scarcely any exception to the universal depression. We are sometimes blamed for writing gloomily, but if the heart is sick how can it rejoice? It is better to speak plainly, and point out the grievance, and suggest remedies when practicable, and although it may be at the risk of giving offence, we decline to falsify accounts. While the trade is bad we shall report it so, and not represent it as being otherwise Buyers must be considered as well as sellers, but to speak of a market as steady and buoyant when it is weak and declining would not help sellers in the least, and they might be very much misled. Of one thing our readers may rest assured—that when a change appears we shall not fail to chronicle it, but the outlook is too dismal at present to warrant us in forming any sanguine views of the immediate future.

The returns from the various producing districts, like all their predecessors, continue to show that the markets throughout the country remain in a most unsatisfactory condition, the holidays causing the trade to decline; but hopes are entertained that after the vacation, which can hardly be reckoned as over until the commencement of next week, a more lively tone may be observed on the markets, as it is thought by some that the unsatisfactory state in which politics have been remaining are less serious. Several of the mills at Leeds are said to be working but short time, and the demand for all descriptions of iron, with the exception, perhaps, of best Yorkshire, keeps in a most slothful condition, there apparently being no inclination either on the part of the buyer or seller to buy or to sell; the former declaring that they are totally unable to buy at the existing scale, whereas the seller on his part often refusing to make contracts, as the present quotations prevent him to make little or no profit. The statistics from South Durham show that the stocks of Cleveland ironmasters a net decrease of 1500 tons in May as compared with April. In this district there appears to be a certain amount of speculation going on in pig-iron, and prices have in many instances become rather firmer, the quotations for No. 1 being 43s. 6d.; No. 3, 39s.; and for No. 4 forge 38s. per ton; but although the above quotation for No. 3 rules the markets, makers invariably ask 39s. 6d. per ton. Makers have been disappointed in their hopes which they held shortly back of orders for plates coming in freely, and although 6*l.* 5s. is quoted, it is stated that a good order might easily be placed at 6*l.* 2s. 6d. per ton. The market for bars is reported very dull, and without showing any improvement, the common descriptions being obtained at 5*l.* 10s. per ton, and angles at 5*l.* 12s. 6d per ton. It is also stated from this district that the Weardale Iron and Coal Company have decided that unless the men will agree to accept lower wages to close three of their mills until more favourable times come. Great dulness prevails over the markets at the Rotherham district, their being little or no demand for any description, and prices remain unchanged. Most, if not all the works are reported as being very badly off for orders, and only being employed short time.

It is expected that ere long the Corportion Relief Fund at Sheffield will be reopened on account of the great distress, which is said to become worse and worse every week; and although many of the masters have taken on more men than they require, still there are numbers of hands altogether out of employment. The past week, however, has been kept as a holiday by many of the works, and, consequently, there has been but little or no employment for the men. Still the ironmasters who have attended the daily meetings have been very firm in their quotations, possitively refusing orders at the slightest concessions, and buyers still refusing to buy on speculation, but rather, on the contrary, loath to give the present rates for immediate requirements business has been pretty nigh at a standstill. The home and the shipping trades are both alike, each suffering considerably from the sluggish condition business remains in. Prices are reported unaltered. The markets at Barrow in-Furness, as in all other districts, are very flat, and but little business having been transacted in any description of iron, pig-iron being very dull, and makers have only been enabled to keep two-thirds of their furnaces in blast, but have succeeded in keeping stocks down, which although have not decreased are reported as not having accumulated, and thus this district is said to be in a better position than any other throughout the country. Iron ore keeps firm for the best descriptions, from 12s. to 13s. 6d., and the second ditto from 10s. to 12s. per ton. Manufactured iron is in but dull request, with no material alteration in prices.

At Birmingham a slightly more lively feeling has been observable, and as some confidence in the peaceful settlement of the Eastern crisis is entertained by speculators, not a little speculation has taken place; and it is reported that several of the houses are doing a moderately brisk business; 8*l.* 19s. per ton is quoted for marked bars, which price is strictly adhered to, it being stated almost without an exception. Inferior qualities, however, show a downward tendency, unbranded bars being quoted at 6*l.* to 6*l.* 5s. per ton; 4*l.* to 4*l.* 5s. is quoted for hot-blast pig-iron, and business appears to be slightly healthier, and for foundry pig-iron the demand is said to have improved. The returns show that out of 178 furnaces in South Staffordshire there are 134 out of blast. The New York market is represented as being dull, and prices ruling in buyers' favour, No. 1 X being quoted at $16 50c. to $17; No. 2 X, $15 50c. to $16; and forge, $15 to $15 50c. Stocks, however, are increasing. The demand is light and prices easier—Glengarnock, $23; Eglinton, $22 50c.; and Coltness, $24. Scrap remains dull and unchanged. No. 1 wrought is quoted at $20 to $21, and cast $13 to $16. A fair demand exists for rails at $34 to $35, and old at $18. Manufactured is quiet, and prices remain unchanged. A good deal of speculation was observable on the warrant market at Glasgow all last week, prices varying from 49s. 8d. to 50s. 8d. for prompt cash, and a fair amount of business transacted.

SHIPMENTS.

For the week ending June 9, 1877	Tons	7,733
For the week ending June 8, 1878		7,008
Decrease		725
Total decrease for 1878		23,722
Imports of Middlesborough pig-iron into Grangemouth:—		
For the week ending June 9, 1877	Tons	6,240
For the week ending June 8, 1878		5,329
Decrease		911
Total decrease for 1878		2,525

FURNACES.

In blast June 9, 1877	111
In blast June 8, 1878	90

To-day's cash price, 49s. 10½d.

TIN.—The market had a drooping tendency until yesterday, when there was some activity displayed, and the market was soon cleared of the cheap lots, and 61*l.* 10s. was eventually obtained. The following is an extract from the Melbourne Argus of April 15, under the heading of News from Tasmania:—"Great discoveries of tin are reported at Mount Beamskirk, on the West Coast, The wash dirt at 5 ft. was not bottomed. Nuggets of splendid tin were obtained weighing 2 lbs. The discoverers expect to trace the lode in the mountain. It is anticipated that this discovery will rival that at Mount Bischoff." The advices from New York state that the market continues steady.

TIN-PLATES.—The arrangement for advancing prices, which was positively stated to have been made between the various makers, has fallen through. This is not to be regretted, and we admire the spirit of independence on the part of those who decline to join in such questionable compacts. The market is quiet, but prices are fairly steady. In New York the market is reported firm, and upon the basis of late sales prices show a slight advance.

LEAD.—There is not any change in the general appearance of market, and prices remain as before.

SPELTER.—Steady, but quiet. A public sale of 120 tons zinc has been made at 20*l.* 5s.

QUICKSILVER.—The official quotation remains 7*l.*, but the importers are sellers of parcels of 100 bottles at 6*l.* 18s. 9d. The demand is light, whilst supplies continue to flow in freely.

THE IRON TRADE.—(Griffiths's Weekly Report).—Friday evening. The Glasgow market for Scotch pig-iron has been quiet during the week. This morning the market opened at 49s. 10d., and in the afternoon business was done at 49s. 11d., closing buyers at this price. We quote makers' No. 1 iron:—Gartsherrie, 58s.; Coltness, 61s.; Calder, 58s.; Langloan, 58s. 6d.; Summerlee, 57s.; Monkland, 51s., f.o.b, Glasgow; Glengarnock, 56s. 6d.; Eglinton, 51s., f.o.b, Ardrossan; Shotts, 59s. 6d., f.o.b., Leith. The iron market continues quiet with a moderate business Scotch pigs are not quite so firm this week, although the Middlesborough market is nominally the same in price, less buoyancy was manifested on Tuesday last. The deliveries on the Thames have been less this week than for some months past, owing to the general holiday in the manufacturing districts this week, which closed most of their works. No doubt a better feeling exists in the trade under the improved prospects of peace, but we regret to say that for the present we cannot report more orders on this market. Copper, tin, and spelter are all weaker, and the two former are about 10s. per ton lower.

THE MINING SHARE MARKET presents no particular change this week, and the dealers have been chiefly occupied with the settlement of the fortnightly account, which was rather heavier than usual. There is no further improvement to report in the price of metals at present, and pending the result of the Congress the great rage still exists for foreign bonds.

TIN MINES are entirely neglected, and our quotations merely nominal. Dolcoath are quoted 29 to 31; Carn Brea, 40 to 42½; Tincroft, 10½ to 11½; Cook's Kitchen, 1¼ to 1½; South Condurrow keep in fair request at 11½ to 12; South Frances, 2⅞ to 3¼; West Frances, 2⅞ to 3; Wheal Agar, 3¾ to 4¼. Penstruthal, 4s. to 6s.; we understand the directors have succeeded in raising the necessary capital here, and it is hoped, therefore, the shareholders will soon meet with some reward for their patience and outlay. In former times the mine was one of the richest in Cornwall for copper, and has now great prospects for tin, like all the other old copper mines in the district. South Crofty, 8¼ to 9¼; the East Pool lode has been cut into 29 ft. at the 205 fm. level, and is a fine promising lode. Wheal Kitty (St. Agnes), 1½ to 1⅝; Wheal Peevor, 6¼ to 6¾. Wheal Grenville, 3 to 3½; at the meeting held to-day, particulars of which will be found in another column, a call of 5s. per share was made. At Wheal Uny meeting, particulars of which will be found in another column, the accounts as presented showed a loss on the quarter's working of 1272*l.* No call was made. The sale of tin—146 tons—was the largest the mine ever made, and with a better price would make good profits.

COPPER MINES are still quiet, with nominal quotations. South Caradon, 60 to 70; at the meeting on Tuesday no dividend was declared; this is the first time for many years that such a thing has happened, and is owing entirely to the low price of copper. The mine is looking well, but of course the deeper it gets the more expense there is in working it, and the fall in the price of its produce becomes a serious affair. The cost for three months was 7834*l.*, the returns were 1433 tons of copper ore, which sold for 7557*l.*, loss on the quarter 50*l.* 18s. The balance in hand and carried forward is 2533*l.* Should copper improve the mine may resume dividends. West Tolgus, 60 to 62; West Seton, 12 to 14; Parys Mountain, 8s. to 10s. Morfa Du, 12s. 6d. to 17s. 6d. (12s. 6d. paid); the prospects are very encouraging; there is a good lode of blue stone with saving work for copper; this is some way from being under the great deposit of bluestone (zinc), and where it has always been expected a mass of copper might be found.

LEAD MINES are still mostly in demand, but the business has become rather restricted, and our quotations, for the most part, are merely nominal. Roman Gravels, 7⅞ to 8; the 110 south, or bottom level, produces stones of lead. The 110 north ½ ton per fathom, The 95 south 2½ tons. The winze sinking below the 95 is worth 3 tons. Tankerville, 3¾ to 4½: West Tankerville, ½ to ⅝; Van, 21 to 23; East Van, 4¼ to 4⅜; Great Laxey, 17½ to 18½; Leadhills, 3⅜ to 3⅝; Llanrwst, 2 to 2½; North Laxey, 3s. to 5s.; Pandora, 15s. to 20s. Clementina, 1⅛ to 1⅜ (1*l.* paid up); this mine is now in full operation again, with a good capital in hand; and a new wheel is to erected for more efficient and economical working. The bottom ends are both improving. D'Eresby Mountain, 80 to 100; the lode in No. 1 and No. 3 adits have both improved, and the Gorse lode continues rich. D'Eresby Consols, 10 to 12; no change at this mine. South Darren, 40s. to 45s.; the 90 end has improved to 3*l.* per fathom. The sale of ores on the 8th realised 850*l.* 10s., the lead fetching 4s. per ton higher than last month, and the copper averaged 4*l.* 4s. per ton. Denbighshire, 1 to 1½; Glenroy, 15s. to 20s.; Grogwinion, 3 to 3½; Great Holway, 5 to 5½; Rookhope, ⅜ to ½; Tyn-y-Fron, 1⅜ to 1⅝; Temple, 5 to 5½; West Chiverton, 8⅜ to 9½; Wye Valley, 1½ to 2; West Wye Valley, 2½ to 3; South Cwmystwith, 3¾ to 4; Mawston, 55 to 60; Caron, 2 to 2½; Hartington Moor, 1½ to 2½; Red Rock, 2 to 2½; Great Harmon, 2 to 3; West Pateley, 2 to 2½.

FOREIGN MINES.—Colorado United, 4⅜ to 4⅝; Chontales, ½ to ⅝; Blue Tent, 3 to 3¼; Hultafall, 4 to 5; Don Pedro, 11s. to 13s.; Eberhardt and Aurora, 6½ to 7; Cape Copper, 33 to 34; the directors have declared a dividend of 17s. 6d. per share. Flagstaff, 12s. 6d. to 17s. 6d; Frontino and Bolivia, 1½ to 2; Javali, 7s. to 9s.; New Zealand Kapanga, 7s. 6d. to 12s. 6d.; Last Chance, 1 to 1½; Pestarena, 4s. to 6s.; Port Phillip, 10s. to 12s. 6d.; Richmond, 12½ to 12¾; St. John del Rey, 305 to 315; Santa Barbara, 22s. 6d. to 25s.

The Market for Mine Shares on the Stock Exchange has naturally been much interfered with by the holidays, but in the comparatively few transactions which have taken place the improvement noticed last week has been fairly maintained. The Richmond Company's affairs have naturally been the leading topic of conversation—the report of the committee, and the expulsion of Mr. Pulbrook from the board. It is felt that at the forthcoming meeting Mr. Pulbrook should be reinstated as a director before any other business is proceeded with, if for no other reasons than that he is the author of decidedly the best edition of the Companies Acts which has been issued, and he understands the whole working of companies from their first inception to their final dissolution; indeed, for his knowledge of company working he has been almost apotheosised by one of the greatest English judges. In a case which was heard before the Lords Justices the late Lord Justice Knight-Bruce, whose ready wit was always refreshing and enjoyable, remarked—"What? Mr. Pulbrook is vendor to the company, promoter of the company, solicitor of the company, secretary of the company, and liquidator of the company. Well! I wonder they did not appoint an angel." "Perhaps he would not have acted my lord" retorted Mr. Baggallay, and the matter dropped. Now from this it is obvious that if the Richmond shareholders cannot have an angel at the board they may at least have "an angel's substitute" in Mr. Pulbrook. It should be remarked that the reinstatement should be made conditional upon the cessation of all litigation in connection with the expulsion, and upon his relinquishment of any privilege he might hereafter claim of winding-up the Richmond Company.

Devon Great Consols, 2½ to 3; the dispute at the mines has not yet made much progress towards settlement, although the real obstacles to an arrangement are now well known. Several correspondents from the neighbourhood do not hesitate to mention by name the principal actors in the opposition to the company; one confidently states that no men will be employed to work the mine

by the present staff, and suggests that the only effectual remedy will be to make a clean sweep of all except the actual working men. It is to be hoped that by this time the opinion is justified that if Mr. Peter Watson, the chairman of the company, were to meet them himself an arrangement could quickly be effected. If it be true that the feeling exists in the neighbourhood that "most of the officials at the mine are acting as decided enemies to the company," the presence of Mr. Watson would be still more desirable. At the present moment there would be no difficulty in replacing many at the mine from amongst the large number of excellent agents and miners now seeking employment, and the Devon Great Consols people may certainly congratulate themselves that the indifference to the shareholders (owing to the present depression) as to whether the mines are for the next few months in operation or idle has prevented such a step being determined upon already. If Mr. Watson's presence at Tavistock or the mine would facilitate a settlement it is almost his duty to go there, and give all employed an opportunity of terminating the present troubles by calmly discussing the points of disagreement. Mr. Watson has already had great experience in settling matters between employers and employed, and his decisions have always given satisfaction to both sides, and we hope by next week to announce that all has been satisfactorily adjusted, and that the men are at work.

St. John del Rey, 305 to 315: the advices received to-day, dated Morro Velho, May 18, state that the produce and profit for the month (April) show a falling off compared to former returns. The amount of mineral treated is less by 404 tons, and the produce per ton by 0·562 oits. than that for the previous month. The smaller output of mineral is due to a lower average attendance of borers daily, consequent on the Easter holidays, which, together with that of the surface labourers, has been most irregular. The decline in the average yield per ton is accounted for by the continued extraction of an inferior class of mineral from the upper part of the eastern reserves, where the lode is not so productive, and a reduced quantity of the quartz from the north wall of sections 255 A and B, which has now been cut through. The supply of good mineral from stopes 278 A and B has also been limited, and will continue so until the A shoot is long-hened, which now becomes necessary, as any great extraction of mineral from those two points would interfere with the passage of the kibble to the sump. The work for the lengthening thereof is fairly advanced, and will be complete in about six weeks. It may be noted that larger returns of good mineral could be obtained; but with the present proportion of pure mineral a large extraction of mixed and poor mineralised killas is desirable, so as to maintain a uniform width of excavation and a permanent system of stoping operations. The general appearance of the lode in both eastern and western sections shows no material change.

The Tolima Mining Company have issued a report to the shareholders. From the statement of cost and returns for the ten months ending March it appears that the mines themselves are rather more than paying cost, so that a portion of the general management expenses is the amount of loss now being made. Within the ten months referred to 1 5 tons of export ore have been dispatched of a total assay value of 40,453 ozs. of fine silver, or an average assay value of 322 93 ozs. to the ton, results not unsatisfactory when the drawbacks which attended the first four months' operations are borne in mind The directors cannot report any decisive results from the gold-washing operations during the period under review. Since the seventh stream was reached the intervening distance (2¾ miles) between the head of the existing canal and the River Cristalina has been surveyed and cleared. As a further expenditure of about 3000*l.* would be requisite to complete the canal, its extension has been temporarily discontinued, the requirements of the Frias Silver Mine absorbing for the moment all the resources of the company.

Richmond, 12 to 12½; the usual weekly telegram from the mines at Eureka states that the week's run was $65,000, from 1046 tons of ore. During the week the refinery produced $60 000. There was one day's stoppage for repairing the machinery. There appears to be some slight misunderstanding between the directors and the committee, to judge from Mr. Bayliss's circular, as well as between certain members of the committee itself. Although the resolution of August, 1877, distinctly limited the amount to be expended by the committee of investigation to 3000*l.*, they have expended and incurred liabilities amounting to 4097*l.* 18s. 2d.; whilst the services performed are only such as could have been equally well performed in London. The committee complain of the appointment of a clergyman to conduct industrial operations; yet the three members of the committee of investigation who had the assurance to accept the duties of sub-committeemen, and as such visit Eureka as technical censors, receiving a fee of 450*l.* a head for doing so, are likewise gentlemen and not technical men, and, therefore, equally innocent of any useful practical knowledge of mines or smelting works. As a consequence, all their recommendations and suggestions are based on mere hearsay evidence as readily—and, perhaps, more cheaply—obtainable by any individual shareholder as by the committee of investigation. The mere printing of the report and its accompaniments has cost 420*l.*; whilst Mr. Brereton, the sub committee's assistant, receives 1000*l.*, and Mr. Harper, their secretary and accountant, 600*l.* For the technical reports of American engineers (which are really the only documents of any intrinsic value which have been obtained) the committee have paid 497*l.* 10s. A large number of the shareholders have already come to the conclusion (but it is easy to be wise after the event) that the appointment of the committee was a gigantic mistake, and that the manner in which the committee have carried out their instructions a still greater one. But as the old woman applauded an execrable opera on the ground that the singers (poor creatures!) were doing their best, although critics and connoisseurs hissed vehemently, so the Richmond committee are entitled to the cordial thanks of the shareholders and an unhesitating vote of the 35 per cent. surplus which they have expended or incurred liability for.

Colorado United, 4⅜ to 4⅝; the superintendent's letter of May 2 advices sales of ore for April amounting to $18,624½. In the same letter he says:—"The concentrating ore we sent down more on trial than anything else; the pile was accumulating, and we considered it would pay us better to send it straight to the mill rather than to handle it over two or three times, which we should have been obliged to do before our own mill started: we had a good offer for the ore, which did not average much over 25 ozs. of silver to the ton, and arranged with the teamsters to haul it to the mill for $1 per ton. I calculate we have about $25,000 worth of this fourth-class actually out of the mine and on the dump; besides, as I have mentioned, we have every stope in the mine, from the 7th level upward, full of good concentrating mineral." He estimates a net profit of $10,000 per month when the mill is running. Writing on May 18, the superintendent says—"The silver ore shaft is now down 20 ft. below the 7th level, and has at the bottom a vein of a good 8 in. of the richest mineral we have in the mine; in fact, it is from the lowest workings that our principal rich ore is coming, and when you consider that the very bottom of the mine is only about 450 ft. down from the discovery shaft, I think that we may feel satisfied with the present indications and the future prospects of the company." The Brown and Oneida properties, recently acquired by the company, are favourably referred to.

With reference to Utah mines, Mr. Henry Sewell forwards some interesting particulars. The migration of two well-known miners from Gold Hill to Leeds, Utah, has called forth the observation that "many Comstockers are now finding their way to the mines of Utah, and they are always well received. As a rule, the Utah superintendents are like many of those on the Comstock—they do not know half as much as their subordinates, and they are glad to get men who are posted." The Ontario Mine appears to be attracting attention. On Tuesday two bars worth $ 014 were sent by the Union Pacific Express Company; this was followed by four bars worth $ 097 on Wednesday, and four bars worth $6353 on Thursday. In connection with the Flagstaff Company, it appears that in the District Court the examination of witnesses in the case of Erwin Davis against the Flagstaff Silver Mining Company and others is in progress. The latest advices from the Comstock Mines state that the Sutro Tunnel "header," during the week ending May 15, was advanced 73 ft. The quantity of water is equal to 1,285,000 gallons per day. The temperature of the air at the entrance of the tunnel is 61°; at the "header" it is 100°. A correspondent writes:—"Arizona appears to be a country specially gifted; metallurgists find that their greatest difficulty in treating silver-lead ores consists in the difficulty of obtaining fuel for smelting purposes. Thousands of mines which would be valuable if fuel could be procured are now valueless, and hundreds have been abandoned from the same cause. A large number of the mines of Arizona are silver-lead mines, and it is now stated that Arizona embraces 38,000 square miles of coal formation—nearly one half of the coal measures of the United States. The coal is described as of excellent quality, and nearly as clean as anthracite; it burns well, leaves but little ash, no clinkers, and produces no corosive effect on iron. With the present spirit of enterprise in the new El Dorado, we may expect soon to hear of those coal deposits being explored on a large scale."

A correspondent writes that—"In the opinion of able and experienced miners the Comstock is liable at any moment to become the scene of another great mining excitement. Some of these miners are very sanguine, and not a few of them have purchased shares in anticipation of a speedy rise. It was in quite a modest way that the development of the 'big bonanza' began. The miners did not at once pounce down upon it. They struck small veins of ore that gradually led up to it. This was but little over five years ago, and since that time nearly $100,000,000 have been taken from the great ore body. On March 2, 1873, the birth notice of the 'Big Bonanza' stated they commenced raising ore the night before last, and the Consolidated Virginia is now in a fair way to take its place among the paying mines of the Comstock."

The Market for Hydraulic or Gold Washing shares has been unchanged, though there has been some enquiry for shares. There is every appearance of the water season continuing much later this year. Blue Tent, 2⅜ to 3½; the manager writes that washing is steadily progressing, and water abundant. A telegram received during the week announces a further clean-up at South Yuba, resulting in a return of $8600. Birdseye Creek, ¼ to ⅓; the May washing, as announced per cable, has resulted in a profit of $4500, which is considered good.

Hultafall, 4 to 5; the levels being driven east and west in the 14 continue to produce rich blende and lead, and about the same value as last reported. The cross-cut, to cut the lode in the 25 fm. level, is being prosecuted with all possible dispatch, and it is anticipated that the lode will be cut next week. The fine crusher for the dressing-floors has arrived out, and is being erected, and the works generally are being prosecuted in a satisfactory manner.

Lead Mines have not presented any feature calling for special remark; there has been a good steady business at full quotations. Van, 21 to 23; Seaham's shaft is completed to the 120 fm. level. The various points underground are without change. All things are progressing satisfactorily. Leadhills, 3⅜ to 3⅝; the mines are reported to have considerably improved since the meeting reported in last week's Journal. Pateley Bridge, 2 to 2⅛; the 30 east, on Rake vein, is improving again as the end leaves the influence of the cross course. Other parts of the mine unchanged, and looking well. West Pateley, 2 to 2⅛; the discovery at Craven Cross shaft is proving of greater value than anticipated. Other points are without change.

Subjoined are the closing quotations:—

Assheton, 1 to 1¼; Carn Brea, 39 to 41; Devon Great Consols, 2⅛ to 2¾; Dolcoath, 29 to 31; East Caradon, ⅜ to ⅝; East Van, 4 to 4½; Glyn, ½ to ¾; Great Laxey, 18 to 20; Hingston Down, ⅜ to ⅝; Leadhills, 3½ to 3¾; Marke Valley, ⅝ to ⅞; Parys Mountain, ¾ to ⅞; Pateley Bridge, 2 to 2½; Penstruthal, ¼ to ⅜; Roman Gravels, 7⅛ to 8; Tankerville, 3½ to 4; Tincroft, 10½ to 11½; Van, 21½ to 22½; West Assheton, 1 to 1¼; West Chiverton, 8¾ to 9⅛; West Pateley, 2 to 2⅛; West Tankerville, ¾ to ⅞; Wheal Grenville, 3⅛ to 3¾; Almada and Tirito, ¾ to ⅞; Blue Tent, 3 to 4; Cape Copper, 33 to 34; Cedar Creek, ⅛ to ⅜; Chontales, ½ to ¾; Colorado United, 4⅛ to 4¾; Don Pedro, 9-16ths to 11 16ths; Eberhardt and Aurora, 6½ to 7; Exchequer, ⅛ to ¼; Flagstaff, ⅝ to ⅞; Frontino and Bolivia, 1⅝ to 1⅞; Hultafall, 4 to 5; Kapanga, ⅜ to ⅝; Last Chance, 1 to 1½; New Quebrada, 1⅛ to 1¾; Oregon (pref.), 4 to 4½; Pestarena, 3-16ths to 5-16ths; Plumas Eureka, 2⅞ to 3⅛; Port Phillip, ½ to ⅝; Richmond Consolidated, 11¾ to 12; St. John del Rey, 305 to 315; South Aurora, ⅛ to ¼; United Mexican, 3 to 3½.

At the Swansea Ticketing, on Tuesday, 1242 tons of copper ore were sold, realising 5834*l.* 13s. The particulars of the sale were—Average standard for 9 per cent. produce, 81*l.* 12s. 4d.; average produce, 8⅔; average price per ton, 4*l.* 14s. 0d.; quantity of fine copper, 105 tons 13½ cwts. The following are the particulars of the two last sales:—

Date.	Tons.	Standard.	Produce.	Per ton.	Per unit.	Ore copper.
May 21	2621	£77 0 3	7⅞	£ 4 0 5	10s. 2½	£51 6 1
June 11	1242	81 12 4	8⅜	4 14 0	11 0½	55 4 4

Compared with the last sale, the advance has been in the standard 4*l.* 12s., and in the price per ton of ore about 7s. 9d. Messrs. Richardson and Co. report that the Berehaven ore gave an average produce of 9⅜, and sold at a standard of 11s. 5½d. per unit; Cavera, produce, 5¼, per unit, 10s. 1d.; Seville, produce, 6 9-16, per unit, 10s. 1d.; and Betts Cove, produce, 6½, per unit, 10s. 4½d. There will be no sale on June 25. The resolution as to errors in Ticketing, mentioned in the report of the last sale, was upon the proposition of Messrs. Williams, Foster, and Co., seconded by Messrs. Vivian and Son, passed in the form:—"That the present rule with regard to errors be rescinded, and that in all future Ticketings in the event of any buyer claiming that there is a mistake in any of his offers, if the Chairman, in conjunction with the other sellers present, be satisfied that such mistake is *bona fide*, the particular offer in which such mistake is claimed shall be considered null and void; but that the other offers in the same Ticket shall not be so treated, but shall stand as if no error had been made."

The Nerbudda Coal and Iron Company annual report states that the output of coal for the year 1877 only reached 17,038 tons. The output is expected to be increased shortly by the erection of two new engines, &c. The revenue account shows, after deducting all expenditure, inclusive of a heavy outlay on No. 2 shaft, a loss of 133*l.* The directors propose to issue 600*l.* in debentures bearing interest at 7 per cent., in order to provide for the payment of the additional machinery and to supply a small amount of working capital.

The Assam Company will pay a dividend of 25 per cent. for the year 1877, which compares with a distribution of 35 per cent. in the previous year.

*** With this week's Journal a SUPPLEMENTAL SHEET is given which contains: Original Correspondence: Colliery Explosions (J. D. Shakespear); an Examination into the Position and Prospects of Certain Mines—No. VIII. Richmond (W. Gabbott); Richmond Mining Company (J. P. Bridgwater); Richmond Consolidated Mining Company; Brazilian Mines—the Don Pedro; Port Phillip and Colonial Gold Mining Company; Australian Tin; New Quebrada Company; the Wonderful Rich Silver Ores of an Arizona Bonanza—the M'Millan Mine, alias the Stonewall Jackson (H. Sewell, M.E.); Old Treburget Mine; Cornish Mining as a Profitable Source of Investment (C. Bawden); Reminiscences—No. VII.; South de Eresby Mountain (J. Roberts); the late Dolcoath Account (M. G. Pearce); the Low Price of Metals, and the Results arising therefrom (A. Francis); Great Devon Consols—the Five-weeks Account (M. Boundy); Mining in North Wales—Pant-y-Mwyn—the Wild Duck, or Sportsman's Arms—the Scotch Mining Share Market—Foreign Mining and Metallurgy—the Mining Laws of Norway—Corsican and Algerian Copper Ores—Richmond Consolidated Mining Company—Heating a Town by Steam from a Common Centre—Experiments with Dynamite—Steam Converted into Gas—Ure's Dictionary of Manufactures—Lead Mining in Derbyshire—Government Inspection of Mines—Improvements in Pumps—The Patent "Desideratum" Rock Drill (*illustrated*)—Wire Tramways—Consumption of Coal in Mine Engines, &c.

VIEILLE-MONTAGNE.—The report presented at the recent meeting of shareholders was a highly satisfactory one. The results of the period reported upon are favourable, in spite of the depressed state of trade and commerce and the continually declining price of zinc. The profits of 1877 are better than those of 1876. The output of zinc ore has increased 25 per cent., to 68,095 tons, and the output of coal has diminished from 78,100 tons to 53,499 tons. The balance-sheet to the end of December shows the concern to be in an excellent position. The stock of stores, mineral, and manufactured products now exceeds 10,600,000 frs. (424,000*l.*) The net profits of the year, after writing off 1,200,000 frs. upon ores, 151,469 80 frs. upon zinc, and 500,000 frs. upon extraordinary works, was 2 285 843·45 frs. Of this 1,687,500 frs. was distributed to the shareholders as dividends; 367,168·69 frs. was applied, acording to the statutes, in diminution of charges for extraordinary works, and the remainder represents the percentage on results payable to the manager and directors in lieu of other remuneration.

WEST PATELEY.—The discovery referred to last week is causing considerable excitement in the district, during the week some hundreds of people having been to see the ore on the top of the Craven Cross shaft. The manager purposes to sink a little deeper, and drive both ends to prove the vein. Some very solid stones of ore are standing in the ends to commence driving upon. From No. 2 shaft, on North Rake vein, two intermediate levels are being driven between the 32 and 20 fm. levels. There is a pretty lode in each end, carrying stones of lead ore. Other parts of the mine unchanged.

WHEAL PEEVOR.—This mine continues to look well, and is returning large quantities of tin. Any little improvement in the price of this metal would ensure large dividends to the shareholders. Every level from the bottom of the mine to the adit is productive, thus opening up large and valuable reserves of tin.

DUBBY SYKE (Durham).—We had recently the pleasure to announce the discovery at this mine of a large promising looking vein well mixed with lead ore, and the matrix being chiefly carbonate of barytes. It is about two months since this discovery was made, and as it was cut in a rise from the adit level about 100 ft. from surface, it was found impracticable to work the vein unless some means of ventilation were at once applied. The directors determined upon the most effectual means—to communicate with the surface. For this purpose a fan-blast was procured, and a rise through the vein proceeded with, and a shaft also commenced to be sunk from the surface to meet the same. A communication between the two was made a few days ago, and now the proper working of the vein will begin. Meantime house team, grates, dressing or hotching tubs, &c., have been all prepared, and water-leats, &c., cut, and a good supply of water secured for preparing ore for market. In rising through the vein not much more information could be gained as to its productiveness, as the vein headed considerably, and the rise was perpendicular, but it is believed to be an entirely new vein running nearly east and west. One great reason for supposing it to be a new vein is that all the matrix laying about the surface from the pits and opencast workings of the ancients is sulphate of barytes and iron, whilst this vein is chiefly composed of lead ore and carbonate of barytes. The veins in this property were formerly worked at 1-5th and 1-6th due or royalty, the dues are now 1-10th. The mine has already a good cartroad to the station at Middleton in Teesdale, and during the present summer it will have the same to the station at Alston in Cumberland. If a railway should ever be made through the district the barytes alone would be of very great value.

SOUTH DE ERESBY MOUNTAIN.—The 10 ft. lode referred to in a previous number of the Journal has, according to the telegram and report from the agent, considerably improved in value. It is being worked at a depth of about 3 fms. only. Judging from the appearance and yield at this shallow depth a fine lode should be found at the cross-cut, which has almost reached the lode 12 fms. deeper.

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AUSTRALIAN TIN—"KANGAROO" BRAND.

Having recently succeeded in REFINING the AUSTRALIAN TIN to the HIGHEST PITCH OF PURITY, the Undersigned is prepared to SUPPLY an article equal to the BEST REFINED ENGLISH.

The uniform assay of the "Kangaroo" brand ranges from 99·70 to 99·90 pure tin. An exhaustive comparative trial of various brands of Australian tin (see annexed report) have proved the

"KANGAROO" BRAND

To be superior to all other Australian tin, and equal to best refined English.

COPY OF REPORT.

"Sydney Galvanising Works, Sydney, Oct. 1, 1875."

"DEAR SIR,—I have much pleasure in stating that I have found the tin smelted at the 'Kangaroo' Tin Smelting Works superior to any other Australian smelted tin I have used in my business up to the present time, and in no way inferior but quite equal to the celebrated 'Lamb and Flag' tin.

This opinion has been arrived at after several carefully executed practical tests, as well as from metallurgical assays.

"I am, dear Sir, yours faithfully,
"S. L. Bensusan, Esq." (Signed) S. ZOLLNER."

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*** Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be *filed* on receipt; it then forms an accumulating useful work of reference.

MINING JOURNAL VOLUMES WANTED.—Any subscriber possessing duplicates of Vols. I., II., IV. (A.D. 1835, &c.), or of the volumes for 1851, 1852, 1853, 1856, 1857, 1860, 1861, and willing to dispose of them will oblige by sending particulars of price, condition, &c., to the Editor, *Mining Journal* Office, 26, Fleet-street.

ALTEN MINING COMPANY.—I have missed from the Journal for some time past any notice of the Alten Mine, which at one time used to be so regularly quoted by you. Can any of your readers inform me what has become of this once good old-fashioned mining company?—AN OLD SHAREHOLDER.

HOW TO MAKE A MICROPHONE—"H. J." (Redruth).—It has already been mentioned that Prof. Hughes has pointed out that certain non-homogeneous conducting substances, placed in circuit with a battery, possess the property of converting sonorous vibrations into undulating currents of electricity, by which not only can articulate speech be transmitted to a distant Bell telephone, but the sound is very greatly magnified. The simplest form of microphone is that in which two common French nails are fastened down to a horizontal board. About 1½-in. nails may be used, and they are laid side by side with the heads in reverse directions. The nails should be less than the 16th of an inch apart, and the head of one nail should be nearly ½ in. from the point of the other. It is obvious that there will be a space of 1 in. where the nails are parallel to and opposite each other. Before placing these nail in position, a piece of fine wire should be tightly wound round them close to the head. The nails being fixed in position, these wires are connected with a battery and a telephone in such a manner that the nails form the only break in the circuit, which can be closed by laying any conducting material across them. When a third French nail is laid across the other two the electric circuit has a very imperfect connection at the point of contact between the nails; this faulty connection making the apparatus so sensitive that it transmits sounds with wonderful distinctness and power

THE SUPPLEMENTARY SHEET.—We have received occasional complaints, and of late a good many, that the Journal is delivered by country booksellers without the Supplement. Subscribers would oblige us by demanding that the paper should be handed to them complete, as every Journal is accompanied by the Supplement when it leaves our office, and the fault of omission must rest with the country bookseller or their London agent.

Received,—"W. R." (Utah)—"S. H."—The Exhibition—"C. K." (New York)—"H. D. H." (Paris)—"An Old Shareholder"; The company has been long since wound-up and settled—"Subscriber" (Neath)—"E. R. S." (Bilston)—"M. E." (Glasgow)—"Observer" (Morfadu)—"R. B. N."—"A Constant Reader" (Truro) can obtain the information by referring to our reports of the meetings—"E. M." (Birmingham)—"M. K." (Cardiff)—"Shareholder" (Richmond) should attend the meeting, and then he can obtain from Mr. Pulbrook the particulars he requires—"Shareholder" (Wheal Grenville).

THE MINING JOURNAL,

Railway and Commercial Gazette.

LONDON, JUNE 15, 1878.

OUR EXPORT TRADE.

Notwithstanding the depression which has prevailed since the commencement of the year in all our chief industries, it is gratifying to find that our exports so far cannot be considered otherwise than satisfactory—much better, indeed, than might have been expected from the reports received from our principal manufacturing and mining centres. Taking May by itself there has been a decrease in the principal articles of British and Irish produce and manufactures sent out of the country to the extent of 7·4 per cent., as compared with May, 1877, being the difference between 17,461,139*l.* and 16,165,075*l.* But taking the five months the deficit is only 0·5 per cent. in the value, the amounts being 79,928,471*l.* and 79,568,762*l.* However some of our manufactures may have suffered from different causes, the iron and steel trades have certainly come out very well, all things considered. Pig-iron of all qualities shows an increase for the year of 2984 tons, Germany and Holland having been our best customers, the former having taken since the beginning of 1878 no less 88,747 tons and the latter 83,029 tons. Unfortunately, however, there has been a falling off in the price from 2*l.* 19*l.* 1d. per ton last year to 2*l.* 13s. 10d. this, showing that our ironmasters have not looked to present profit, but with a determination to hold fast to the markets in which they have long done business, even if in so doing they incur a loss, but expecting, as all do, that there must be a change for the better before long, seeing that pig-iron has now reached a non-paying point. As regards bar, angle, and bolt iron, there has not been so much sent away of late, the total to the end of May having been 92,706 tons of the average value of 7*l.* 6s. per ton, against 107,019 tons valued at 7*l.* 18s. per ton for the corresponding month of 1877, whilst British India and Australia took nearly two-fifths of what was sent away. Railway iron of every description shows to advantage up to the present time, and no doubt will continue to do so. The exports for the present year were 196,607 tons, averaging 7*l.* 12s. per ton, against 16,451 tons for the same period of last year, at 8*l.* 2s. 6d. per ton. Rails, it may be said, formed more than four-fifths of the railway material, Bessemer of course having been in the greatest demand, seeing that the difference in the price between it and iron makes the former owing to its greater durability by far the cheapest. Iron rails are chiefly purchased for lines where the traffic is particularly light, or where railways are being constructed for the first time, so that Australia and British India took more than one-half of the exports, the total for the last five months having been 66,622 tons, against 67,216 tons in 1877, the average price of the former having been 6*l.* 9s. per ton, or 5s. per ton higher than this year. The increase in the consumption of Bessemer rails abroad has been rapid indeed, for whilst in 1876 up to the last day of May our exports were only 30,742 tons, there was sent during the same time in 1877 no less than 71,989 tons, and this year 91,783 tons. Of late Germany has taken largely from us, 22,180 tons having been sent there in the last five months, against 3807 tons in the same month of last year. Australia has also taken from us so far in 1878 19,134 tons, British North America 8227 tons, and Spain 6457 tons.

On the other hand, considerably less has been done with Russia and British India, whilst the exports to the United States for the year have been *nil*. The average value of steel rails for May last was 7*l.* 14s. per ton. Taking the five months of the three years the exports of iron and steel rails were 125,139 tons, 139,205 tons, and 157,805 tons respectively, and the values 1,037,470*l.*, 1,067,878*l.*, and 1,141,196*l.* Steam-engines appear to have been in brisk request, for the declared worth of those sent away to the close of May of the present year was 1,012,392*l.*, against 814,784*l.* in the same months of last year. British India stands at the head of the list, having taken to the extent of 359,724*l.*, Australia being next with 131,518*l.*, and then Germany and Russia. Of other descriptions of engines, Russia took the value of 217,950*l.* this year, as compared with 67,525*l.* in the same months of 1877, whilst France and Germany were both excellent customers.

Our exports of coal show a falling off for May, but an increase for the year so far as it has gone, the quantity having been 5,986,322 tons, as compared with 5,871,774 tons for the four months of 1877; but there was a considerable increase this year in the coal shipped for the use of steamers engaged in the foreign trade. Last month no doubt, in a great measure owing to the understanding come to with respect to the Eastern Question and the meeting of the Congress, and the consequent removal of impediments to trade with the North of Europe, Russia took a much larger tonnage of our coal than she has probably ever done before, being credited with 268,200 tons, the total for the previous four months having been only 168,266 tons. In the same month there was a decrease in the quantity sent to Germany, Sweden and Norway, Denmark, Italy, and British India. The exports of coal for May alone in 1877 was 1,562,265 tons, the declared value being 10s. 1d. per ton, and in May, 1878, they were 1,501,979 tons, of the value of 9s. 6d. per ton only. This shows how keen has been the competition with continental colliery owners, for the prices at which coal has been selling, so far from leaving a profit, have led to a loss in many instances; but our exporters at all cost must have their old markets open to them.

Taking the last five months we find there has been an increase of exports over the same months of 1877, the totals being 5,871,774 tons, and 5,986,322 tons. In favour of 1878 there has been an increase to Russia from 332,739 tons last year to 436,466 tons; to France from 1,123,245 tons to 1,301,957 tons; to Italy from 429,388 tons to 452,859 tons; and to Brazil from 123,758 tons to 157,004 tons. The action taken by our own Government, and the large fleet sent to Malta and the Sea of Marmora, has led to extensive stocks being laid in at the former port. In conclusion, the exports this year of steel, iron, and coal, so far as quantity is concerned, compare favourably with those of 1877, but at the same time they exhibit a serious decrease in the values of each.

THE HAYDOCK COLLIERY EXPLOSION.

The terrible explosion which took place at the Haydock Colliery, in the St. Helen's district of the Lancashire coal field, and near to the scenes of similar calamities a few years since, but not resulting in such a frightful loss of life, singularly enough coincided in many ways with an article in Saturday's Journal on "Explosions and Explosives in Collieries," written only a day or two before that appalling occurrence. As we pointed out, in the majority of such fatalities the actual causes have never been traced to their positive source, the probability in many instances being that those who alone could throw light with respect to them have fallen with others, and numbered with the dead, so that conjectures and deductions that may be or may not be correct are the only results we have given to us after most complete and exhausting investigations by coroners, scientific witness, and others. In some few instances, such as the explosion at Blantyre, where 210 lives were lost, the cause was clearly shown to have been gross carelessness and inattention on the part of the officials, and the recklessness of the major part of the workmen. Going further back, we recollect that the cause of the explosion at the Oaks Colliery in 1866, when upwards of 360 lives were lost, was never cleared up or agreed to, although the ablest mining engineers of the day gave evidence, Mr. DICKINSON, the Government Inspector, and Mr. BLACKWELL, who were deputed by the Home Secretary to report on the calamity, actually came to different conclusions as to how it occurred. Now, with respect to the Haydock explosion we are told that safety-lamps were used in all parts of the workings, and that blasting was not allowed. In some of the reports, however, this latter statement is to some extent qualified. We have also been told that the ventilation was in every way satisfactory, seeing that more than ordinary attention was paid to it, and examinations frequently made at different times of the day, which is not usually done at collieries. Indeed, if all statements are reliable, and there is no reason for doubting them, more precautionary measures were adopted by the manager and officials than is ordinarily the case. Seeing also that the seam of coal at Haydock was known to give off gas, and that there had been fatal explosions at pits adjoining where the same bed was being worked by the same owners, we may take it for granted that on the morning of the explosion all the working places were thoroughly examined by the properly qualified persons appointed for the purpose to see that they were in every way free from gas before the men commenced work. We may also assume that the lamp-keeper had examined most carefully all the lamps before placing them in the hands of the miners, having found them in good condition, clean and free from any blemish whatever.

Now, if all these necessary conditions had been complied with to the fullest extent, as there is every reason to believe was the intention of the owners, it would seem to have been almost impossible for an explosion to have taken place, for to effect an explosion there must have been a mixture of from 11 to 14 per cent. of fire-damp along with the air, together with a light of some sort or other. Some allusion has been made as to the state of the barometer at the time of the occurrence, but this may be dismissed at once as having no connection whatever with the explosion, for the instrument was steady for several days, whilst as an indicator of danger it is not now thought so much of as formerly by our colliery managers. The seam of coal in which the blast took place it is said had been sunk about 120 yards below its original level, owing to a heavy fault, so that it was driven close to one of the fiery seams of the Wigan series, which was on the opposite side of the fault. But there are several faults passing through the coal field of Wigan and Warrington, one of them having a throw of 650 yards, whilst there are others between St. Helen's and Newton, in a line with the Haydock pits. But all these are well known, and it is difficult to see how even the tapping of a fiery seam with ordinary precaution could *per se* lead to an explosion. Certainly a large quantity of gas might be given off, but then, with safety-lamps, we cannot see how it could be exploded. On the other hand, if there was a naked light in any part of a mine where gas was oozing out, either from the coal, the roof or the floor, in quantities sufficient to overcome the ventilation, then an explosion with all its life-destroying power could not fail to be the result. But, as we have before pointed out, there are two essentials that must be found together in a mine before it is possible for an explosion to take place—fire-damp, and a light or spark to ignite it. When fire-damp is mixed with from 30 to 15 times its volume of atmospheric air the flame of a candle on being plunged into it is elongated and enlarged, but when the fire-damp is 1-14th of the entire volume the inflammation extends through the whole gaseous mass. The inflammation, however, increases with the proportion of gas, and when it amounts to one eighth or one-ninth of the total volume it is explosive in the highest degree, but when fire-damp increases still further it becomes less and less explosive. If, however, gas be in the proportion of one-twelfth the cylinder of metallic gauze of a Davy lamp will be filled with a blue flame, whilst a Stephenson lamp will be extinguished.

These are the warnings that should guide the miner and all other persons who are working in collieries, for it is by the lamps that the safety of a working place is indicated, for when a Stephen-lamp goes out the man who has it should know that the place was not safe. It is, therefore, plain with reference to the Haydock Colliery that before the explosion there must have been a naked light or spark or a damaged lamp from some cause or other, as well as a large accumulation of gas, or a sudden outburst, although the latter is almost unknown in the district. However, the enquiry, which we have no doubt will be a searching one at the instance of the Government, may be able to bring out the truth as to whether there were naked lights used in any part of the mine, and whether blasting has been carried on either with or without the consent of the persons in charge of the collieries. Messrs. EVANS have the credit of working their collieries on the safest possible principles, with the best lamps, and without powder, yet we all know that the wishes of employers are not always carried out, whilst managers cannot always be present during ordinary operations, nor will workmen refrain from reckless and thoughtless acts that too often terminate in their own destruction. If it should be found that safety-lamps only were tolerated, and no blasting allowed whilst the ventilation was well maintained, then those who have been deputed to investigate the cause of the catastrophe will find in all probability that they will not be able to proceed much further, for like many other of these fearful explosions the actual secret will be found to have been buried with some of the unfortunate deceased. We may believe that there is not one of the men that have been rescued who can tell whether a lamp was damaged accidentally or otherwise, or whether for some object or another a match was lighted in an atmosphere that was considered to be tolerably good, but which, in fact, was impregnated with gas to an extent that made it highly explosive.

We have no desire to hazard an opinion as to what led to the explosion, but desire to point out the many difficulties that lie in the way of reaching the facts, even by the most experienced mining engineers and barristers. That they will be ably grappled by all connected with the enquiry may be taken for granted, and that they may be successful in their efforts we feel sure will be the desire of every person connected with our collieries, and who have taken an interest in the sad calamity which has desolated so many homes. Sympathising, as we do, most heartily with the sufferers who have been so suddenly deprived of those who made and maintained so many homes, we hope that the miners in the district will now see the necessity there exists for the formation of a Permanent Fund for the benefit of those who may be left unprovided for by such accidents, so that their wives and children should not be made solely dependent for support under similar circumstances on the generosity of the public, liberal as that always has been on such occasions as that of the recent explosion.

RICHMOND CONSOLIDATED MINING COMPANY.

Without in any way denying the correctness of the view that the report of the committee of investigation may contain recommendations worthy of being carried out, it may be accepted as an unquestionable certainty that it is to the interest of all who have the welfare, present and prospective, of the Richmond Company at heart to use their utmost possible endeavours to avoid drifting into litigation. We stated, long before any decision had been given in the Eureka litigation, that, according to the most ordinary common-sense reading of the American law, a verdict in favour of the Richmond Company could not reasonably be hoped for. That litigation has cost the company 19,872*l.*, whilst 19,750*l.* would have sufficed to pay a dividend of 7s. 6d. per share upon the entire 54,000 shares in the company. To enter upon a career of litigation in connection with the Luce and Rozan desilvering patents would involve a loss incalculably greater than in the Eureka dispute, as the result would, in accordance with the American law, which invariably and very properly protects the holders of patent rights against all comers, inevitably be adverse to the company. As to the dispute with Mr. PULBROOK, a compromise could no doubt be made, as he does not appear to be opposed to the best interests of the concern, and he must well know as a lawyer that he cannot reasonably expect a verdict in his favour since he certainly placed himself in such a position as to permit of the company's Articles of Association depriving him of his seat at the board, though he probably did so inadvertently. Mr. PULBROOK would not wish to remain at the board if the shareholders have lost confidence in him; if they still have confidence in him they can readily replace him provided he, at the time of re election, possess the necessary qualification.

From the letter of Mr. JOHN BAYLISS to the Hon. RANDOLPH STEWART, contained in the circular forwarded to the shareholders by Mr. BAYLISS and Col. F. G. STEUART, we can only conclude that these gentlemen's leading desire is to promote the welfare of the company. Well, therefore, may it be hoped that they may accept the Chairman's explanation of the reason that proxies were invited for both meetings, and by withdrawing all really existing or supposed opposition permit the meeting to proceed at once to the calm discussion of practicable improvements as to the future management of the company. It is here desirable to refer to one small point upon which a slight misapprehension of public etiquette has caused bad feeling. Mr. BAYLISS states that "if the directors really desire 'a calm and clear elucidation of the proposals' made by the committee, they have (in deciding to wait 'until the shareholders meet!') adopted a most extraordinary and unlikely method to obtain the desired result." Now, such a view can only result from misapprehension. As the committee's report and directors' reply were not issued simultaneously to the shareholders, the committee were practically in the position of having "stolen a march" upon the directors, who were thereby placed in the position of the defendants in a lawsuit, who would be considered insane if they exposed their entire answer except in Court. To judge from the committee's report there seems to have been at least a tendency to make the facts chime in with a hypothesis already accepted, and the general meeting is the best place for proving whether such hypothesis requires modification. The result of the meeting, however, which will be fully reported in next week's *Mining Journal*, may do much to vary conclusions which appear at the moment to be justifiable.

GOLD MINING IN VICTORIA.—We have been favoured by the Secretary for Mines, Major COUCHMAN, with reports of the mining surveyors and registrars for the quarter ended December, 1877. It appears that the total quantities of gold got respectively from alluviums and quartz reefs during the several quarters of the year were—

	Alluvial.	Quartz.	Total.
	Ozs. dwts.	Ozs. dwts.	Ozs. dwts.
March quarter	61,358 4	121,432 14	182,790 18
June quarter.....	72,784 6	128,284 13	201,068 19
September quarter ...	77,106 4	130,527 19	207,634 3
December quarter ...	78,505 5	139,653 19	218,159 4
Total for the year ...	289,753 19	519,899 5	809,653 4

During the December quarter 38,005 miners were employed, of whom 13,570 Europeans and 9745 Chinese were employed in alluvial mining, and 14,559 Europeans and 131 Chinese in quartz mining. The approximate value of mining plant employed was 2,029,962*l.* The quartz crushed averaged 9 dwts. 6 grs. of gold to the ton, and yielded 117,338¾ ozs. The quartz tailings and mullock averaged 2 dwts. 0·37 grs., and yielded 914 ozs. of gold. The pyrites and blanketings operated upon averaged 1 oz. 16 dwts. 21·77 grs. to the ton, and yielded 3254¾ ozs. of gold. The detailed reports of the several inspectors and registrars are appended as usual.

COLLIERY PROPRIETORS AND DAMAGE TO HIGHWAYS.—The question as to who is liable for the repair of damage to highways caused by subsidence owing to ming operations has been again before the Ashton-in-Makerfield Local Board at their meeting. At a previous meeting it was resolved to obtain counsel's opinion on the matter. The "opinion" obtained was as follows:—

"The public are entitled to absolute support to the roads in question, and the lessees of the mines can only so work them as to leave sufficient support to prevent the highways from subsiding. It is clear that the subsidence of the roads in question being in some instances to such an extent as to become dangerous to persons passing in vehicles upon them is a public nuisance of a very grave character, because all injuries to a highway which renders it less commodious to the public are nuisances at common law. I am of opinion the Ashton Local Board have a remedy against persons working the mine, either by way of injunction or by indictment. If the subsidence be of such a character as portends the possibility of a further and more dangerous sinking of the road, I think that the board should bring an action in the Chancery Division of the High Court of Justice for an injunction to compel the lessees of the mines so to work them as to leave sufficient support to the roads, and also compel them to restore the roads to their normal condition. If the board had incurred expenses, or substantial pecuniary damage, through the improper working of the mines by the lessees a claim should be made for such damage.—JOSEPH PHILLIPS, King's Bench Walk, Temple."

The committee before whom the opinion had been laid resolved that proceedings be taken against certain colliery proprietors to compel them to repair the damage to the roads caused by the working of their mines, and after a stormy discussion—the members of the board who are colliery proprietors objecting to this course—the minutes of the committee were approved and confirmed.

LECHNER MINING MACHINE.—A most peculiar machine bearing this name is at present being introduced in America. It consists of a pair of vertical engines, besides a high framework carrying a multitude of toothed wheels, pinions, cranks, flat chains, &c. There is a cutter bar 4 ft. long, which would apparently reduce much of the thickness of the seam to powder; this bar is rotated by a flat chain, and on the back motion the whole of the debris is drawn out. It is stated that one air-compressor costing 400*l.* will run three machines, and that a cut can be put in 6 ft. deep in eight minutes; it is added that all that is claimed for it has been accomplished.

NEW WAGON COUPLING.—At the meeting of the Colliery Engineers' Institution, held at Newcastle, on Saturday, Mr. William Douglas, of Blaydon, exhibited a patent coupling for wagons. Mr. Douglas said he believed there had been a great many contrivances and mechanical appliances invented in connection with wagon couplings, but all had been ignored, more or less, on account of expense. A railway company might have 40,000 or 50,000 wagons, and the slightest alteration involved a large expenditure of money. His brother and himself having seen some of those contrivances, thought railway companies would never adopt any expensive method, and his brother thought a simple appliance might be contrived. Their appliance consisted in putting a bridge across the end link of every coupling chain, and a man by using a pole with a hook at the end specially adapted for the purpose could lift up the coupling chain by the bridge and uncouple wagons. Some hundreds of railway servants were killed or injured by going in between

wagons to uncouple them, but with this contrivance a man could stand outside and with the pole lift off the coupling chain. In the last few weeks the engineers of the Great Northern, North-Eastern, South-Eastern, and London and North-Western Railways had seen the appliance, and considered it the simplest and cheapest contrivance. The bridge could be contracted on to any coupling chains, and an order for 20 sets had been received from the Great Northern Railway for the purposes of trying it.

REPORT FROM CORNWALL.

June 13.—This week's prospects are decidedly brighter. The substantial advance in the copper standard at the last Ticketing, and the minor, though still encouraging, improvement which has taken place in the price of tin, may be taken as assured indications that when once the Eastern imbroglio is definitely settled matters must improve. We see proof of this in the revived inclination to open out new or partially tried mineral ground in various localities, though it may be long ere mining will again lift up again its head in those districts from which it has been practically expelled by the untoward action of the last few years. Still even there the tide may turn, for it cannot be said of any part of Cornwall that its mineral riches are exhausted, or that, indeed, they are reduced below the certainty of profitable production if the efforts are rightly directed.

Negociations have been in progress with the intention if possible of settling the dispute at Devon Great Consols, but so far without any satisfactory result. Neither side will give way on that which involves the principle at issue, and nothing would surprise us less than to see this once grand undertaking thrown utterly idle, to the far more serious loss of the shareholders than a judicious continuance under the old system of working, which admitted of the reduction of wages to any desirable extent, would have involved. What the stoppage of the mines would mean indeed, is not quite clearly understood, but it is generally believed in the district that the Duke of Bedford will not scruple to exercise all his legal rights. He is a wealthy man, and can afford to take his own course. It must be pretty clear also by this time that if the hope of obtaining miners from other districts to work under the five-weeks month system in Devon Consols was ever really entertained, it may as well be given up now. The Cornish miners will not work on these terms, and there is no reserve to fall back on in Devon, while the men at Tavistock are fast being absorbed elsewhere.

The works connected with the laying out of the line which is to connect the sett of the new Dartmoor Peat Company with the London and South-Western Railway, near Bridestowe, are making rapid progress, and it is intended to push on with the actual construction as speedily as possible. This seems the most likely of all the undertakings that have been launched with a view of utilising the immense deposits of Dartmoor peat, which is as fairly to be termed incipient coal as any of the kind. There is, however, some uphill work before it, and not a few unreasonable prejudices to overcome.

A striking instance of the hidden dangers of old mine shafts has been supplied at Camborne. Some workmen engaged in laying the mains of the water company in the highway from Camborne to Pool struck their picks into some rotten wood, thinly covered with earth and metalling, and found it was the sollar of an old mine shaft, which lay directly under the pathway. How old it is no one has any idea, but it is a marvel, and a providential thing that it did not give way under the constant traffic years ago. Had it not been discovered ere long some catastrophe must have taken place.

REPORT FROM NORTH WALES, SALOP, AND CARDIGAN.

June 13.—The reports from the lead mines are unanimous in their reference to the abundance of water for their various operations. This may well be so, for during the last five weeks we have scarcely had more than two consecutive dry days. The rain on the other days making up by its intensity for these breaks in its continuity. On the whole, the reports from the mines seem as healthy as they have done for some time past. The well-known mines of Roman Gravels and Van are keeping up their character underground. At the latter mine a large profit is said to be now made in addition to the ordinary income by the retreatment of the immense waste heaps by means of some very effective machinery, invented by the veteran manager, Mr. Williams. Indeed, if report says truly, the bulk of the large profit made at this mine is derived from ore of a poorer grade than much of the ore thrown on the waste heaps in the North of England. The success lies in the perfect mechanical treatment of the ore at the lowest possible cost.

The slightly paying and the prospective mines report hopefully. These include such mines as the Blaen Caelan, Bettws-y-Coed, Clementina, Bodidris, Tankerville, West Tankerville, the D'Eresbys, Cwmystwith, and others that will readily occur to your readers. Looking at the whole of this class of mines broadly, I think it may be said that as far as they have been proved hitherto, and many of them have been extensively proved, the average produce of lead per fathom of the whole ground laid bare is from 15 cwts. to 1 ton per fathom. The possibility is that one or two of them may strike a richer course of ore, and for a time be very successful. The extreme probability is that by far the larger proportion of them will continue to yield the same average amount of ore per fathom to the end. The question, therefore, which each captain of these mines has to face is this—Can he make his mine pay on a production of 1 ton of ore per fathom? If the efforts of directors, managers, and everybody connected with such lead mines were directed to the successful solution of this problem there would be more paying lead mines than there are. The letter of "F. G. S.," in last week's Journal, on "Parabolic Lodes," is one of the cleverest bits of parabolic irony I have seen for many a day—too much so, perhaps, to strike straight home. Still, we must not any of us be too dogmatic. There is yet a good deal to be learned concerning the formation of fissures and the circumstances that have shaped their course, as well as of the ways in which they have been filled with their contents, metallic and otherwise. What we want is a greater accumulation of a better classification of and a wiser deduction from reliable facts than we have yet had. Henwood wrote an immense lot, but to get at a principle in the midst of his heterogeneous accumulation of phenomena is like looking for a needle in a bottle of hay.

It is not often that we hear of an accident to a woman at a colliery, but Jane Jones, a screener at the Green pit of the New British Iron Company, was nearly crushed to death last week. The employment of women at collieries in this country looks like a relic of more barbarous times. In the same locality John Morris, married, with four children, was killed at a little coal pit worked by himself and two others, one of whom wound by a windlass the men and coal, and the other two worked below. Morris was being wound up, and when he was near the top the rope broke. He fell 20 yards and and was killed. These little concerns want looking after. The ropes used are mostly bought secondhand from the larger collieries. The pits are often like internal corkscrews, and the whole arrangement ricketty and unsafe. They seem to be beneath the notice of inspectors. Mr. Inspector Hall, in his report, points out that the average annual production of coal per collier in North Wales is 235 tons, against 303 tons per collier in Lancashire. He accounts for the difference by the greater difficulty of getting the coal in North Wales, and he might have added the less average thickness of the seams. It cannot be that the Welsh colliers are inferior to those of Lancashire, because many of the colliers in the latter county are Welshmen.

At last the men of the Penrhyn Quarries are to have a workmen's train from Bangor Quay to the quarries. The absence of railway communication between Bangor and Bethesda is a disgrace to the public men of the neighbourhood. Containing the largest slate quarries in the world it is behind almost every other part of the Principality. The rateable value of Mr. Assheton Smith's quarries at Llanberis—the Dinowin—is fixed for five years at 24,500*l.* The reports of the slackness of the slate trade are exaggerated, and if we are to hold our own against American competition new quarries must be developed. Tenders are now asked for the construction of the railway from Bala to Festiniog. This line will open up a new slate country, and possibly render workable some other mining properties.

REPORT FROM DERBYSHIRE AND YORKSHIRE.

June 13.—Whitsuntide, as usual, has caused very little work to be done during the first half of the week, for however trade may be miners and ironworkers manage to find the material with which to make merry on holiday occasions. At the lead mines business for some time past has been very quiet, for there are only two or places that may be said to be paying. The make of pig has undergone no change, for when the furnaces are in blast they must be fed, without holiday considerations. Raw iron, however, is still very low in price, and cannot be said to be paying, so that there has not of late been much pushing in the markets. Although Derbyshire has plenty of ironstone, yet there is not so much worked as might be expected, so that something like two-thirds of what is consumed is imported from other districts, the largest quantity from Northamptonshire, where the ore is far more silicious than that at home, so that the mixture is beneficial. The foundries have been working tolerably well for some time past, but so much cannot be said with respect to the mills and forges, for they have been very quiet. The Coal Trade has fallen off considerably of late as regards household qualities, whilst prices have also come down, so that the colliery owners who are making ever so small a profit may be considered well off, for not a few say that they are slightly on the losing side.

The railway companies have been doing less than usual, a sure sign of bad trade. The traffic with the Metropolis has been anything but active, and the Great Northern shows a great falling off from the South Yorkshire coal field, and the loss of revenue to the company must be at least 5000*l.* less in May than what it was in April from the carriage of coal alone to London. This is attributed by the colliery owners to the carriage rate, which they say is higher than from most other districts; so that unless there is a reduction the traffic is likely to still further decrease. It may be said that the Great Northern carried 23,800 tons less to the Metropolis in May than it did in April, and this marked decline was shared in by no less than 30 collieries in the West Riding, more especially from Darfield, Hayland, Elsecar, the Oaks, and Lund Hill. Exclusive of the Lillestone coal, there were 5000 tons less from the other pits in May than in April. The Silkstone Collieries were even worse off, for the decrease from the Birley, Cooper's, Stanhope, and four others was nearly 40 per cent. between the two months—the difference being between 11,000 and 18,000 tons. Silkstone Birley still heads the list, and has been sending at the rate of 1700 tons a week to London by the different railways; whilst the Rockingham and Hayland, amongst the comparatively new collieries, have been doing a steady business with London, whilst Mitchell's Main, also recently opened out, has obtained a good position in the metropolitan market. In the Normanton district rather less has been done from St. John's and Sharlstone, and but little has been forwarded from the West Riding Colliery; the two former being credited with about 5000 tons a month. The Great Eastern last month sent an unusually large quantity of coal to London, principally from Derbyshire and the West Riding, the heaviest tonnage being from Clay Cross, Gawber Hall, Blackwell, and Riddings. South Wales provides nearly all the coal forwarded by the Great Western, and the quietness that prevails in the iron trade in the southern part of the Principality, of course, sets free a great deal of coal that under different conditions would be consumed on the spot; so that one iron company has been sending at the rate of close upon 10,000 tons a month. Taking the year so far, however, there has been an increase in the coal traffic by railway, as compared with the same months of last year; singular to say, the London and North-Western showing to the worst advantage, although it carried 141,077 tons more than the Great Northern. The tonnage carried by the various lines for the first five months of 1877 and 1878 was as follows:—

	Tons—1877.		Tons—1878.
Midland	629,266	.....	693,915
London and North-Western	540 392	.....	537,368
Great Northern	361,413	.....	396,291
Great Western	353,892	.....	403,026
Great Eastern	254,032	.....	256,737
Other lines	29,649	.....	28,000
Total	2,168,644	.....	2,315,337
			2,168,644
Increase in 1878		.....	146,693

REPORT FROM MONMOUTHSHIRE AND SOUTH WALES.

June 12.—An experiment is being made at the Bute Colliery, in the Rhondda Valley, of a steam haulier, the invention of Mr. H. W. Lewis, of the Treherbert Engineering Works. It is said that by using this patent, the working of which is simple, the use of horse labour can be done away with. By the use of steam or compressed air, it is claimed that the trains of coal can be run up to the bottom of the shaft, and the empty ones sent back to the headings.

The inquest on the four men killed in the explosion of coal gas on board the Chrysolite, at Newport, on the 6th inst., was resumed and concluded to-day. It appears that it is the custom to load the bunker coal after the cargo has been taken in, and to do this the hatches are temporarily closed, but not fastened down. The explosion is believed to have resulted from the striking of a match by the watchman in a closet near the captain's cabin-door. The jury found that the men were accidentally killed by an explosion of gas, and added as a rider—"We recommend that great care shall in future be used in the shipping of gaseous coal, and, if possible, the bunker coal shall be first shipped, to prevent the hatches being closed while in dock."

During the week some amount of slackness has been occasioned at the various works, in consequence of the Whitsun holidays intervening. There appears, however, to be a little more business in hand at the local establishments, a few more orders having come to hand; at the same time, the lowness of prices must almost prevent profits being made. There is little alteration in the rail department, and prices have not changed for the better. Bars, too, are rather quiet, but it is reported that there is a little more doing in pig-iron. At the steelworks there appears to be a fair average quantity of orders in hand, and the demand for rails is moderately well maintained.

After all, it seems, from a circular issued by the committee of tin-plate makers, which is dated from Swansea, that a restriction of make cannot be generally carried out, as some of the trade refuse to concur. Already prices had improved on the prospect of a reduction. The committee, however, express the hope that a voluntary arrangement to restrict the production may be come to.

The Coal Trade also remains in about the same state—not quite so active, if anything however. Although the shipments of steam coal are fairly maintained, still it is apparent that the demand is not quite so good. Prices, too, are rather less firm. The house coal trade continues dull, but this is not to be surprised at. Anthracite qualities are in moderate request. Patent fuel is not at all brisk; in fact, shipments seem to grow less and less. A rumour which had prevailed among the men that another reduction in wages—5 per cent.—was impending is unconfirmed, and, moreover, has been contradicted.

During the month of May Cardiff cleared 5789 tons of iron, compared with 8623 tons in the corresponding month of 1877; Newport 9221, compared with 9729 tons; and Swansea 524, compared with 1071 tons. The principal shipments were—Bombay, 4804 tons iron, of which 934 were bar, and the rest rail; Constantinople, 776 bar; Gothenburg, 717 rail; Huelva, 1014; Montreal, 581; Alicante, 1000; Aarhuus, 900; Messina, 1350; Porto Torres, 830; St. John (N. B.), 1410; and Valencia, 700 tons rail. In May Cardiff also shipped to foreign ports 330,779 tons of coal, as compared with 363,130 tons in the corresponding month of 1877; Newport, 62,087, against 53,878 tons; Swansea, 62,102, against 59,037 tons; and Llanelly, 6427, against 5828 tons. Coastwise clearances during the same periods were:—Cardiff, 72,227, against 66,648 tons; Newport, 75,825, against 68,654 tons; Swansea, 18,420, against 27,604 tons; and Llanelly, 12,140, against 12,288 tons. But while coal shipments are generally improving, patent fuel shipments show a falling off, the figures being—Swansea, 9036, compared with 12 522 tons, and Cardiff, 7691, compared with 9556 tons.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

June 13.—Whitsuntide week has not seen much work through at the mills, forges, and pits in this district, but this is only usual. Most of the works and collieries began three days late. Masters have not regretted the suspension of operations, for new orders are increasingly scarce. The coming on of the close of the quarter, and the approach of the Midsummer quarterly meetings, which are held in Wolverhampton and Birmingham a month hence, is partly accountable for the reluctance of consumers to enter the market. Meantime a strengthening tendency has been imparted to business by the direction which the Congress appears to have towards a definite peace, and to that extent trade is improved: 8*l.* 10s. is firmly maintained by leading houses as the price of marked iron. South Wales are offering common bars at as low as 5*l.* 15s. and 5*l.* 12s. 6d. Sheets for galvanising are selling well, but the demand is not so good as a few months back. Less than 7*l.* 15s. is accepted for "singles." Angles and girder-plates and ship-plates are being delivered into this district from North of England mills at prices which it is very difficult for native manufacturers to compete against. Pig-iron is not in improved request, and there is no immediate probability of the furnaces now blowing being increased, although many firms have their furnaces ready to be relighted directly the trade revives. In part mine and cinder pigs the competition from other districts is severe. Prices are unaltered upon last report. Forge coal is being loaded into boats, long weight, at under 6s. per ton, notwithstanding that 9s. is the standard price. This alone shows how orders are being competed for.

It is a matter of publicity in this district that the proposed combination for a reduction of output in the tin-plate trade has already "died a natural death." It is, however, satisfactory that, from one cause or another, the present output is less than it was four months ago by from 8 to 10 per cent. It is to be hoped that the causes which have produced this result will ultimately tend to a permanent improvement in the trade.

At a meeting of the Mines Drainage Commissioners in Wolverhampton, yesterday, it was announced that the Queen's counsel to whom the Commissioners had submitted the question of the validity or non-validity of the Bilston petition for exemption from underground ratal, has decided that it was not valid in consequence of not possessing the requisite proportion of owners' signatures. At the same meeting sums were passed amounting to 1147*l.* on general drainage, and 1256*l.* on mines drainage account.

A meeting of miners was held at Darlaston, on Monday, presided over by the rector of the place, at which Mr. Thomas Halliday, the president of the new Amalgamated Association of Miners, delivered an address, and a resolution was passed expressing gratification at the formation of the new Union, and pledging the meeting to do all in its power to further its interests. At present the association does not number 5000 members.

An inquest was held on Tuesday on the bodies of the butty and the two boys who were killed last Friday by an explosion through the firing of a shot by the deceased man in the Sheriff pit, Silverdale, belonging to Messrs. Stanier. The ventilation appears to have been very good, and it was a rule in the pit not to fire shots when the men were in the mine, and nearly all had left when the accident happened. A verdict of "Accidental Death" was returned. The Coroner deprecated the use of powder for blasting purposes, especially in fiery mines, like those of North Staffordshire.

Half-time is just now the rule at the pits in North Staffordshire; still the demand is not equal to the supply, and stocks of coal are large. Pig-iron is in only dull sale, and inferior sorts can be bought as low as 2*l.* 5s. per ton. Finished iron buyers hold back to see what the Quarterly Meeting is likely to bring forth. That prices can, however, come any lower is next to impossible.

REPORT FROM THE FOREST OF DEAN.

June 13.—We are unable to report any improvement in the coal or iron trades of the district. Instead of improving they rather go worse and worse, being at a very low ebb of the commercial tide. Nor is there much probability of improvement to any marked extent for months to come, seeing that we are close upon midsummer; and the summer, as a rule, is not a season of the year when an impetus in the coal trade takes place. The tin-plate trade, too, is by no means locally active, whatever it may be elsewhere, although the wages received are upon a reduced scale. The labour market is also very dull in nearly all branches of business throughout the district, and tradesmen generally complain of the times, as they well may, since failures and compoundings clearly indicate that the local "pinch" pierces through all the strata of local society. Some believe that trade will never again be what it was a few years ago; whilst others think that prosperity will return and again gladden the hills and dales of the old Forest of Dean. To some extent we ourselves participate in the hope of revival, though we are not so sanguine as some are in that direction. The action of combinations of various parties during prosperity tended not only to check prosperity in England, but by giving an impetus to manufactures and material development abroad, to henceforth make it more difficult to English capitalist to compete in the world's markets. In passing we are tempted to refer with great confidence to the fact that the investing capitalists and mineral traders especially have a wise, judicious, and true friend in the Editor of the *Mining Journal*, who evidently has their welfare in his mind, as from week to week he writes "Remarks" on trade for his paper, and they would consult their own interests by a thoughtful perusal of them as they weekly appear in print.

But to return from this digression, we are led to advert to an old homely proverb as just now receiving an illustration in this district, that "it is an ill wind that blows no good to anyone." The Severn and Wye Railway Company has deserved well of the Forest, as being the first to introduce passenger traffic into the district, although we regret to add that, as bad trade closely followed their efforts in that matter, their returns have not been equal to their deserts, small dividends having given them comparatively slight encouragement for their investments. Still, the company has bravely held on its way, and shown much courage by contributing a good sum towards the completion of the Severn Bridge. In doing that they have not only shown courage but commercial wisdom too, as that investment is likely to enhance the value of their own line. And there is now a prospect of the Severn Bridge line and the Severn and Wye line being merged or becoming one property, and of being ultimately worked by the Midland Company. In this prospect we sincerely rejoice, as being likely to be the best thing that could be done, both for the investors and for the public, as it will be the most likely way to secure better returns and facilitate the conveniences and necessities of the public. The proposed joint adventure has our best wishes.

But now for the further illustration of the quoted adage. The Severn and Wye Company, the Severn Bridge Company, and the Midland Company, having breathed the kindly wind of co-operation for the mutual benefit of themselves and the public, it also acted as a stimulant to the lethargic Great Western Company, arousing the directors to act in self defence lest the trade of the district should slip from their hands to others. The Great Western Company hitherto has cared nothing for the passenger accommodation of the interior of the Forest, but now an effort is being begun. The Whimsey and Mitchel lean Road Company spent over 50,000*l.* it is averred in an attempt at constructing less than five miles of line, and failing to complete it with that amount they sold it some short time since to the Great Western Company for about one fourth its cost, the Great Western thus securing a good bargain, and with an eye to making it decidedly a good purchase the company has just surveyed about two miles of ground to make the line a through branch to connect the Hereford and Gloucester line with the South Wales by having the distance from Shakemantle to Deadman's Cross constructed for joining it with the Mid-Forest line, and thus connect it with the South Wales at Awre Junction. And it is also in contemplation by the Great Western Company to construct a short line from or near the Awre Junction to connect their system of rails with the Severn Bridge. If these proposals should all be carried out the Forest will be much better supplied with railway facilities than heretofore. The Severn Bridge is advancing well towards completion, having, we understand, nearly reached the Forest side by reaching the last span, so that ere long, when the short tunnel to connect it with the Severn and Wye system is finished, the joyful event of the opening gala day may be counted upon for the delectation of the local public.

The Miners' Union is broken up as an organisation for aggressive work, and its funds mostly divided amongst a few. We have reason to believe, however, that the public has not been fairly dealt with as to the money. Our informant, who had much to do with the old amalgamation, tells us that little short of 400*l.* of the old Union was voted to be divided among the members just after the strike, but some of the leading officials got together and privately put aside that resolution, and placed the money, or most of it, in the bank in their own names, so that the design of its contemplated distribution was defeated. They (the officials and some others) then joined the National Society, and passed along with them the money of the old society, so they (the officials) have recently divided funds among the National members and officials which belonged to the Amalgamated Union

formerly in existence, which, if correctly reported to us, lays the said officials open to an action of law should the former members of the Amalgamated Union think it worth their while to take the matter up.

TRADE OF THE TYNE AND WEAR.

June 12.—There is little change to notice in the position of the coal and other trades here, but hopes are entertained that should the result of the Congress be satisfactory a revival of business will occur at no distant date. A fair trade is done in steam coal of best quality, but some of the works are only moderately employed. At the South Durham household collieries there is considerable slackness; more work relatively is done at the same class of pits in North Durham. The steam and gas coal trades, the time of year considered, are doing a fair average business, though prices run low. Gas coals are only 6s. to 7s. per ton. The coke trade is slack, and more ovens have lately been stopped. Fifty men have received notice to leave at Monkwearmouth Colliery owing to the slackness of trade.

The market at Middlesborough, on Tuesday, was of a holiday character, as the attendance was limited, and business was small, the tone of the pig-iron trade being somewhat quieter than was the case a few days since upon the issue of the stocks. There was some enquiries to-day, but few purchasers. Some of the makers who are fairly sold ask 39s. 6d. for No. 3, but 39s. is the real market figure, and 38s. for No. 4 forge. In an exceptional case or two towards the end of last week 39s. 6d. was realised, less 1 per cent. The shipments to Scotland were not so good last week. In nearly all cases the finished ironworks are closed for a day or two because of the holidays. There is no improvement manifested in this class of trade taken generally. The pig-iron market, like the stock market, is a barometer indicating by rapid upward or downward movements the advent of good or bad tidings. The manufactured iron trade is less active and marked in its action than the pig-iron. Neither the position of the trade nor the prices have been affected as yet in sympathy with the rise in pig-iron. There are, however, better hopes, as there is a pretty general feeling that one department of trade will improve with the other, though it may be more slowly. The bar manufacturers, who have had a low condition of things throughout the season, do not seem likely to experience any better trade just yet. Plate makers, too, do not find business so brisk as a few weeks since. Ship-plates are still about 6*l.* 2s. 6d.; bars unchanged; sheets, 7*l.* 17s. 6d. to 8*l.*; angles, 5*l.* 12s. 6d., less the commission. The trustees of two estates—Thomas Vaughan and Co. and Messrs. Charlton and Co.—have called meetings for next week. The outlook for creditors in each case seems a very poor one. The low prices in the chemical trade and the slightly improved tone of general business are tempting buyers from the Continent, and we may fairly hope for a rise before long.

OUR RAILWAY IRON ABROAD.

May was a languid and unsatisfactory month for our export iron trade. The political uncertainties of the moment told greatly, no doubt, upon business. Anyhow, we find that the quantity of rails and railway iron exported from the United Kingdom in May did not exceed 40,463 tons, as compared with 64,333 tons in May, 1877, and 50,299 tons in May, 1876. For the first five months of this year our railway iron exports attained, however, an aggregate of 196,607 tons, against 164,510 tons in the corresponding period of 1877, and 144,723 tons in the corresponding period of 1876. There appears to have been rather a sharp contraction in the exports of rails to Russia and the North of Europe in May; the colonial demand also fell off, to some extent, last month. The three principal groups of colonies—British America, British India, and Australasia—have taken from us, however, very considerable quantities of railway iron this year, the exports to May 31 comparing as follows with those effected in the first five months of the two previous years:—

	1876.		1877.		1878.
British America.....Tons	20,593	.....	9,175	.....	10,583
British India	20,509	.....	33,759	.....	51,736
Australasia	12,611	.....	28,325	.....	38,070
Total	53,713	.....	71,259	.....	100,419

This important department of our railway iron commerce has thus been progressively improving during the last two years, the low rates current for rails having naturally encouraged the Anglo-Indian Government, as well as the governments of the various Australasian colonies, to embark in extensions which might very possibly have been otherwise deferred. The great guaranteed systems of British India have now become self-supporting to so large an extent that the burthen entailed upon the Indian Treasury by the guarantees given in respect of them is not of very much importance. Under these circumstances, the Anglo-Indian Treasury is clearly pursuing a wise and prudent policy in endeavouring to profit from current circumstances, and to make more Indian railways when rails can be had upon reasonable terms—and even more than reasonable terms—and conditions. The same remark applies, *mutatis mutandis*, to the governments of Victoria, New South Wales, South Australia, Queensland, and New Zealand. In all these colonies railways are great public necessities, and every year they are becoming more and more productive, so that they can be undertaken at less risk to the colonial treasuries. In Victoria even the earlier constructed railways now involve comparatively little loss to the Victoria exchequer, as they are earning a respectable interest upon the capital devoted to their construction, while the more recently made Victorian lines, being constructed upon cheap terms, and being furthermore made with capital raised at an interest of about 4½ per cent. per annum, pretty nearly pay their way. Under such circumstances as these, it is not at all surprising to find that there is still a strong Indian and Australian demand for our rails.

It is curious to note that the South American demand for our railway *matériel* has rather revived this year, notwithstanding the shock given to South American credit by the default upon their bonds of Peru, Uruguay, Venezuela, Bolivia, Paraguay, Bolivia, Costa Rica, and one or two other honourless South American Republics. Thus the exports of British railway *matériel* to Brazil, Peru, and Chili come out as follows for the first five months of the last three years:—

	1876.		1877.		1878.
Brazil .....Tons	5,514	.....	9,447	.....	8,005
Peru	1,709	.....	31	.....	2,040
Chili	1,565	.....	578	.....	345
Total	8,788	.....	10,056	.....	10,390

Here, again, low prices have probably had the customary effect of stimulating consumption. As we have heard a great deal of late about the efforts which American industrials are making with the view of obtaining a footing upon the markets of South America, it is satisfactory to note that British railway iron holds its own very well in that quarter of the world, notwithstanding the competition attempted by Brother JONATHAN. This is another proof that low prices for English rails have, at any rate, a decided tendency to check external competition.

ROCK DRILLS.—An improved machine of the percussive class has recently been invented by Mr. A. H. ELLIOTT, of New York, and may be used either with steam or compressed air. Its valve is moved by air or steam, and rotates the piston, and the cylinder is fed to the rock by hand. In this machine there are but two moveable pieces—the valve piece and the piston; there is, therefore, less liability to injury and wear, the use of projections or tappets to move the valve or pawls and ratchets for feeding and rotating being here dispensed with. The ordinary D valve is used, but it is made circular, and has at each end a piston turned to fit the valve-box, and is provided with a guide to prevent its turning round. The valve-box has exhaust ports for the valve pistons, and these ports are carried across and to opposite ends of the box, and lead down into the steam cylinder through suitable openings. From this the exhaust is carried into the main exhaust port by a groove or recess turned in the piston, and thence by openings in the side of the cylinder. To operate the machine the air or steam is turned on, and the valve being caused to move upwards (the exhaust from the upper end of the valve box being open) and the valve moving upwards opens the main supply port to the lower end of the cylinder, and at the same time freeing the exhaust from the upper end of the piston, immediately begins to rise till its groove closes the exhaust from the upper end of the valve box, which then allows the valve to return downwards, and supply steam or air to the upper end of the piston, and thus move it to the rock. This movement of the piston closes the exhaust from the lower end of the valve box, and opens the upper end, causing the valve to raise and continue the motion.

SHOLL'S STAMPS AT BOTALLACK MINE.

On Tuesday, the 4th inst., one of Sholl's (Single-head) Rotary Pneumatic Stamps (small size) was run at the above mine, with highly satisfactory results, in the presence of the managers, agents, and practical tinners of Botallack, Wheal Owles, and surrounding mines. The stuff selected was the hardest the mine afforded, and slimy in character, and the report of the agent shows that the machine ran 5½ tons of this stuff through No. 36 grates in considerably less than five hours at a maximum speed of 140 blows per minute with a 5-inch belt. The larger and direct-acting machines are of the capacity of 1½ ton per hour per head; and these stampers must take an exceptionally high position in the tin and gold quartz mining of the future, as the absence of all glands, and the few pieces of which they are constructed, reduces the wear and tear of these overtaxed machines to a minimum, as well as allowing a large quantity of ore to be stamped and dressed in a limited space.

PHOSPHOR-BRONZE.

The use of phosphor-bronze for bearings, slide valves, and various other purposes where hardness, toughness, and durability has now become recognised as indispensable in many machinery factories, so that the Phosphor-Bronze Company's exhibit in Class 43 is naturally regarded by practical men as one of the most interesting in the Paris Exhibition, although mere pleasure-seeking visitors may pass it by. One specimen is a bearing for finishing rolls used in a rail-mill at Bolton Iron and Steelworks. The mill was run day and night without stopping from June 1, 1875, to June 27, 1876 (eight months). It was then taken out at the request of the Phosphor-Bronze Company for exhibition. It showed very slight wear, although in the same rolls the collar of an ordinary bell-metal step is worn off in three weeks. A bearing for pinions used in the same works was taken out very slightly worn, after 27 months work, also for exhibition; an ordinary bell-metal step in the same rolls being worn out in 15 months. But a still more interesting exhibit are phosphor-bronze and gun-metal bearings, which have been used simultaneously. In Messrs. Barclay, Gray, and Co.'s crushing mills there were phosphor-bronze bearings on one side and gun-metal on the other, working at 120 revolutions per minute, each roll having a pressure on it of 2½ tons. The gun-metal bearings were completely worn through, whilst the wear on the No. 7 phosphor-bronze was scarcely perceptible. The phosphor-bronze bearings were supplied to these mills, November, 1874, and were working night and day 122 hours to the week, until July, 1876, when they were taken out and sent to the Phosphor-Bronze Company for inspection, accompanied by the worn out gun-metal bearings. As slide valves for locomotives, marine-engines, and such like, phosphor-bronze has proved invaluable.

The pair exhibited were put to work on May 14, 1876, and taken out for exhibition March 20, 1878. The wear during 22 months, 1-32nd of an inch. Miles run 78 277. Four trips of 250 miles each per week, between Newcastle and Edinburgh. These slide-valves were taken out at the request of the Phosphor-Bronze Company, from the North-Eastern Railway Company's standard express engine No. 903, weighing 40 tons; weight of tender, 26 tons—total, 66 tons; four coupled wheels of 7 ft. diameter; pressure of boiler, 140 lbs. per square inch; diameter of cylinder, 17 in. by 24 in. Mr. Fletcher has given a very flattering certificate of the working of the valves. The phosphor-bronze slide-valves have not required the least attention in the repairing shop, although between Berwick and Edinburgh the engines have to run down a heavy incline for about seven miles, when, as no steam is admitted into the cylinders, the slides receive no lubrication. The locomotive superintendent states that the longest life of ordinary gun-metal slides, perforated on the faces, and filled with white metal, has been but 15 months, when they were quite worn out, but in most cases they did not last more than eight months, whilst phosphor-bronze slide-valves, as exhibited, may at the rate they have worn hitherto last from seven to eight years. A most important point is that the cylinder faces on which the phosphor-bronze slide-valves have been working are not worn, but in perfect condition. Equally satisfactory comparisons could be given as to the durability of the phosphor-bronze in its various applications, but these will suffice to show that the company's stand is well worthy of a visit.

PERCUSSION ROCK DRILLS.

The valveless principle appears to have been to some extent abandoned by Mr. DARLINGTON, for in a recently secured patent he provides for the use of a valve at the rear end of his machine. The invention in question relates to improvements in the means of obtaining the reciprocating movement of the piston, to the rotating of the piston on its axis, to the moving of the actuating cylinder and its piston towards or away from the work to be done, and to the attaching the tool or head to the piston-rod. For the better holding of the cylinder, he forms it round in section, and cuts a screw thread on its outside circumference throughout its whole length, if required. This screw cylinder is then inserted into a suitable screwed nut or holder, which may be attached to any stand or carriage by well-known means. To advance the cylinder it is only necessary to cause it to turn in the nut, when it will be screwed either backward or forward through the nut. This movement may be given by hand, a handle or hand-wheel being attached to the cylinder for this purpose, or it may be given automatically, a lever being arranged having its fulcrum on the nut or holder, one end of it being operated on by the moving piston-rod, and the other end operating on a ratchet wheel, or similar contrivance, attached to the cylinder, in such a manner as to cause it to be turned in either direction, as may be arranged.

In percussion rock boring or similar machines it is necessary that the cutting tool should be turned into a fresh position after every blow; this may be done in several ways, either by hand or automatically. If done by hand he attaches the piston and rod to the cylinder in such a way that while free to move in a longitudinal direction it will be carried around with the cylinder as the cylinder is turned. In this way as the cylinder is turned or fed forward or backward the tool is carried with it, or he inserts a rod or rods into the rear end of the cylinder, which pass into a suitable recess in the piston, allowing the piston to move freely longitudinally, but compelling it to turn as the rod is turned. In this way the piston may be turned independently of the cylinder, which cylinder may be turned automatically or by hand, as may be desirable, or he so arranges a twisted or spirally-fluted rod in the inside of the cylinder that it passes into the interior of the moving piston, which has a suitably-shaped nut attached to it. At the upper end of the twisted or spirally-fluted rod is carried a ratchet-wheel, which is free to turn in one direction, but held by pawls or dogs from turning back again. In this way the piston moving in one direction turns the ratchet-wheel, but when moving in the opposite direction is obliged to turn itself and follow the path of the spiral or twists on the bar, the ratchet-wheel being held from turning by the pawls, or he so arranges a ratchet-wheel at the front end of the cylinder that the piston-rod shall pass through its centre; a spiral groove or grooves is cut into the piston-rod, into which suitable projections from the ratchet-wheel fit.

The ratchet-wheel is free to turn in one direction, but is held in the opposite one; or he imparts the required rotary motion to the piston by two ratchet-wheels placed at the front end of the cylinder and around the piston-rod, the wheels being geared by feathers on their bosses into grooves on opposite sides of the piston, one groove being spiral, and the other straight or parallel to the axis of the end, and which wheels are detained from rotating in one direction by pawls or dogs suitably arranged for that purpose. To reciprocate the piston Mr. Darlington prefers the arrangement which he patented in 1873, but he does not confine himself to that combination, as he contemplates arranging a system of distributing the steam by means of a valve or valves arranged at the rear end of the cylinder. The fluid pressure he admits at the rear end of the cylinder through a revolving joint or cock, which admits such pressure to the valve-box or pressure chamber in any position of the cock, thus allowing the cylinder to be turned while still keeping its interior in communication with the pressure.

With regard to the attaching of the tool or head to the piston-rod, Mr. Darlington also suggests a new arrangement. A suitably tapered hole is formed in the centre of the end of the piston-rod, and the tool or head has a similarly tapered end or shank formed on it; a cotter hole is formed near the inner end of the said taper hole, so that the tool or head may be forced out by driving a cotter in behind it, or otherwise such cotter hole may be formed in the head of the boring tool itself in such position that when the tool is fixed for boring purposes the hole is partly within the piston-rod and partly exposed, the latter sufficient to admit of receiving a cotter and of drifting the tool from its taper holder; or a ring or shoulder may be placed on the tapered end of the tool or head, and the tool or head drifted from the taper hole by a wedge or key inserted between the end of the piston-rod and ring or shoulder referred to.

GOLD.—The amount of Gold produced in Wales during the year 1877 was 11 lbs. 7 ozs. 4 dwts. 13 grs.; and in Ireland 4 ozs. 1 dwt, 5 grs. Gold Ore produced in Ireland during the same period, 1 cwt. 3 qrs. 5 lbs. Gold Sulphurets in Wales (Merionetshire) in the year, 2 tons 19 cwts. 8 lbs.

DISCOVERY OF COAL.—A fine bed of coal has been discovered at the Wilson Wood Colliery, Ingleton, owned by Mr. W. Bracewell. The seam is 4 ft. in thickness, and extends over a large area.

COAL MINES REGULATION ACT, 1872.

EXAMINATION FOR MANAGERS' CERTIFICATES OF COMPETENCY.

DISTRICT UNDER THE CHARGE OF THOMAS BELL, ESQ., H.M. INSPECTOR OF MINES.

PERSONS desirous of being EXAMINED in this district for MANAGERS' CERTIEICATES OF COMPETENCY, under the above-named Act, should at once communicate with the Secretary to the Board of the above mentioned district, at the following address.

By order of the Board,
G. W. BARTLETT, JUN., Secretary.

Cleveland Parade, Darlington.

N.B.—Persons who do not reside within the District are equally eligible for examination with those who do.

WANTED,—PARTICULARS, PRICES, and ILLUSTRATED CATALOGUES of COAL MINING MACHINERY of every description, including TOOLS, TRUCKS, APPLIANCES FOR SHIPPING, &c. Also PRICES of STORES REQUIRED, such as SAFETY LAMPS, WIRE ROPE, CANVAS, BRATTICE CLOTH, COTTON WASTE, and all Machinery supplied.
Address, SHORT, SHORT, and Co., 91, Queen Victoria-street, E.C.

WANTED, for the CENTRAL FOXDALE LEAD MINES (Isle of Man), an UNDERGROUND CAPTAIN. Must be thoroughly experienced.
Address, stating particulars as to age, qualifications, where last employed, &c., to Mr. THOMAS HUGHES, Secretary, 59, Seel-street, Liverpool.
Applicant's character must bear the strictest investigation as to honesty and sobriety.

A GENTLEMAN SEEKS an APPOINTMENT in ENGLAND or ABROAD who studied MINING and METALLURGY with ALLIED SCIENCES for four years. Since had several years experience. Treatment of Auriferous, Argentiferous, and Cupreous ores and products a speciality. Highest testimonials, &c.
Address, "Analyst," Post Office, Scorrier, Cornwall.

TO MINING DIRECTORS AND CAPITALISTS.

AN EXPERIENCED MINING ENGINEER AND METALLURGIST, about to proceed to San Francisco, will be GLAD to INSPECT MINING PROPERTIES, and Report on Smelting-works in the States.
Address, "Beta," MINING JOURNAL Office, 26, Fleet-street, London, E.C.

OVERSHOT WATER-WHEEL FOR SALE, 30 feet diameter, 3 feet breast; never used.
Apply to JAMES DAVIES, Bwlchowa, Festiniog.

A BONUS of £15 WILL BE GIVEN to any Gentleman who places 100 Shares in a good LEAD MINE in a fortnight.
Particulars from "Zeta," care of Mr. Rutter, 5, Pyne's-terrace, St. David's, Exeter.

THE CAPE COPPER MINING COMPANY (LIMITED).

Notice is hereby given, that at a MEETING of the Directors of this Company, held to-day, it was resolved—"That a DIVIDEND of SEVENTEEN SHILLINGS AND SIXPENCE PER SHARE, free of income tax, be and is hereby declared PAYABLE on the 24th day of June instant, to the shareholders on the books of the company on the 15th instant, and that the Transfer-books be closed during the said 15th instant." By order of the Board,
J. C. LEAVER, Secretary.

6, Queen-street-place, London, the 12th of June, 1878.

NOUVELLE MONTAGNE COMPANY.—The DIVIDEND for the year 1877 will be PAYABLE—

First,—On the 30th of June next, FIFTY FRANCS PER WHOLE SHARE, coupon No. 26, and TEN FRANCS PER FIFTH OF SHARE, coupon No. 43.

Second,—On the 31st of December next, ONE HUNDRED FRANCS PER WHOLE SHARE, coupon No. 27, and TWENTY FRANCS PER FIFTH OF SHARE, coupon No. 44.

The coupons for encashment to be presented to Messrs. C. DEVAUX and Co., 62, King William-street, E.C., London.

Le Directeur-General de la Société,
Engis, the 10th of May, 1878. V. BOUHY.

SOUTH AURORA CONSOLIDATED MINING COMPANY (LIMITED).

Notice is hereby given, that an EXTRAORDINARY GENERAL MEETING of the South Aurora Consolidated Mining Company (Limited) will be HELD at the Canon street Hotel, Canon-street, in the City of London, on THURSDAY, June 20 inst., at Two o'clock in the afternoon, when the following special resolutions, which were duly passed at the Extraordinary General Meeting of the Company held on May 31 last, will be submitted to the meeting for confirmation, pursuant to the 51st section of the Companies Act, 1862, viz.:—

1.—That this company be wound up voluntarily.

2.—That Mr. Louis Bergthell, public accountant, and Mr. Charles Cadogan, secretary of the company, be appointed liquidators, and that their remuneration be fixed at the sum of 50*l.* each.

3.—That this company approve the following scheme of reconstruction, viz.:—"That a new company be incorporated under the name of The Consolidated Mining Company (Limited), with a capital of £100,000, divided into 100,000 shares of £1 each, the whole of which are to be issued as fully paid-up shares, for the purpose of taking over the business, assets, and liabilities of this company in exchange for 90,000 shares in the new company, which are to be distributed among the members of this company, in exchange for their existing shares, in the proportions of three shares in the new company for every two shares in this company, the remaining 10,000 shares in the new company to be applied, so far as may be, in acquiring by way of exchange the shares in the Olmeta Copper Company of Corsica (Limited), and the Luna Company of Corsica (Limited) respectively, not already held by or on behalf of this company, and any balance of shares of the new company which may not be required for the above purposes, to be dealt with as the board of directors of the new company may determine."

4.—That the liquidators be and they are hereby authorised to concur with any other person or company in the incorporation of a new company for the purpose of carrying into effect the above scheme, or any reasonable modification of the detailed terms thereof, which they may find convenient in carrying out the substantial terms thereof, and that, pursuant to section 161 of the Companies Act, 1862, the liquidators be and they are hereby empowered to transfer or sell the business and property of this company to such new company, and to receive in compensation for such transfer or sale 90,000 fully paid-up shares of £1 each in the capital of such new company, for the purpose of distribution amongst the members of this company, pursuant to the above mentioned scheme.

5.—That the purchase money for the interest of any dissentient member be raised wholly or in part by a sale of the share or shares which would otherwise be allotted to such member, or out of such funds and by such means as the liquidators and the new company may agree upon.

6.—For the purpose of the above scheme the draft agreement intended to be made between the liquidators of the one part, and Arthur G. D. Griffith, a trustee, on behalf of the new company of the other part, and also the draft Memorandum and Articles of Association of the new company respectively, submitted to this meeting (and which are identified respectively by the signature of the Chairman of this meeting at the foot thereof) are respectively approved.

By order of the Board, CHAS. CADOGAN, Secretary.
Dated this 11th June, 1878. 17, Abchurch lane, E.C.

MESSRS. W. REYNOLDS AND CO.,
STOCK AND SHARE DEALERS,
57, GRACECHURCH STREET, AND TALBOT COURT,
LONDON, E.C.

TO BE SOLD, FIVE 24-inch INGERSOLL ROCK DRILLS, with PIPING, AIR COMPRESSOR, AIR RECEIVER, BOILER, and FITTINGS.
Address, "J. C. M.," MINING JOURNAL Office, 26, Fleet-street, London.

TO BE SOLD, OR LET, SEVERAL VALUABLE GOLD MINES, in the neighbourhood of the ST. JOHN DEL REY MINES, BRAZIL.
Apply to Mr. T. C. KITTO, 5, Ferris Town, Truro.

GLASGOW AND THE HIGHLANDS.

ROYAL ROUTE VIA CRINAN AND CALEDONIAN CANALS by the new steamer "COLUMBA," or the "IONA," from GLASGOW DAILY at 7 A.M., and from GREENOCK at 9 A.M., conveying passengers for NORTH and WEST HIGHLANDS. See bill, with map and tourist fares, free, at Messrs. CHATTO and WINDUS, Publishers, 74, Piccadilly, London; or by post from DAVID HUTCHESON and Co., 119, Hope-street, Glasgow.

HENRY SEWELL, M.E,
318, PINE STREET, ROOM 34,
SAN FRANCISCO.
Cables will reach him by addressing—"Sewell, San Francisco."

C. H. WALKER AND CO.,
MINING AGENTS AND ENGINEERS,
VALPARAISO AND SAN IAGO,
CHILE.

Mr. BRENTON SYMONS, Ass. Inst. C.E.,
CONSULTING MINING ENGINEER.
Twenty-five years' experience in the Mining Districts of Great Britain, Central America, Hungary, and Turkey.
SPECIALITIES.—The Mining and Reduction of the Ores of Gold, Silver, Lead, and Copper.
66, ST. CLEMENT'S HOUSE, ST. CLEMENT'S LANE, E.C.
And at 11, PARADE, TRURO, CORNWALL.

JOHN L. M. FRASER,
BERSE COTTAGE, NEAR WREXHAM.
Fourteen years at the Great Minera Mines.
MINING AND FINANCIAL AGENT.
SEVERAL LEAD ROYALTIES ON SALE.

HENRY WIGGIN AND CO.
(LATE EVANS AND ASKIN),
NICKEL AND COBALT REFINERS
BIRMINGHAM.

Mr. E. JACKSON,
Associate of the Royal School of Mines,
ANALYST AND ASSAYER.
Assays or Complete Analyses made of Copper, Silver, Lead, Zinc, Tin, and other Ores. ASSAYING TAUGHT.
106, QUEEN VICTORIA STREET, LONDON, E.C.

J. J. ARIS AND CO.,
MINING ENGINEERS, MINERAL AND METAL MERCHANTS,
29, FENCHURCH STREET, LONDON, E.C.
Mines inspected and reported upon.

MEXICO, NEW MEXICO, ARIZONA, UTAH, NEVADA, AND CALIFORNIA.

F. M. F. CAZIN,
MINING AND CIVIL ENGINEER,
At BERNALLILLO, NEW MEXICO, U.S. OF AMERICA,
Has 24 years' experience in Mining and Smelting, and 10 years' experience in American Business and Law, offers his services at moderate charges for Reporting on Mining and other Property in any of the above-named States or Territories; gives correct, safe, and responsible advice as to securing full titles and possession; and, as to best mode of utilising the property, will assist in settling existing difficulties by compromise, and in disposing of developed mining property when held at real value; offers his assistance for securing undeveloped mining properties at home prices. As to care taken in reporting, reference is made to the *Mining Journal* Supplement, April 1, 1876, containing report on property of the Maxwell Land Grant and Railway Company; as to technical standing, to the prominent men of the trade—compare *Mining Journal* of Aug. 30 and Nov. 31, 1872, and *New York Engineer and Mining Journal*, Feb. 28, 1874.

DEVON AND CORNISH MINES.

THE DIFFICULTY experienced by London and other distant Mine Shareholders, in obtaining RELIABLE INFORMATION respecting the state of Devon and Cornish Mines, may be most effectually overcome by corresponding with the undersigned, who from personal inspection and investigation is in a position to give sound advice respecting same.
The advice given will be based upon sound judgment and ability, but at the same time is exceedingly fluctuating is mining that he does not in any way hold himself responsible, or subject to blame, should results not always equal expectations.
A Special Report and Inspection of any Mine in Devon or Cornwall for £2 2s.

SPECIAL BUSINESS IN

PARACOMBE (Lead).	GREAT WHEAL RODD (Lead).
GREAT WHEAL ELEANOR (Tin).	BROWNGELLY (Copper).
COMBMARTEN (Lead)	SOUTH MOLTON (Lead).

Also—WEST OF ENGLAND PEAT SHARES.
Further particulars from—
R. J. RUTTER,
MINE BROKER,
5. PYNE'S TERRACE, EXETER.

MR. TIMOTHY HUGHES,
MINING AGENT AND SHAREDEALER,
59, SEEL STREET, LIVERPOOL.
Reliable information given respecting Welsh and Manx Mines.

MR. WILLIAM BREDEMEYER, MINING, CONSULTING AND CIVIL ENGINEER, U.S. MINERAL SURVEYOR FOR UTAH AND IDAHO, NOTARY PUBLIC.
Geological examinations; reports on mining properties; surveys mines, railroads, and canals, and superintends the workings of the same. Prepares estimates and plans for opening and working mines. Expert on mining questions before the Courts.
Address, "P. O. Box 1157," Salt Lake City, Utah.

MESSRS. W. J. TALLENTIRE AND CO., STOCK BROKERS, AND DEALERS IN BANK, TRAMWAY, MINING, AND MISCELLANEOUS SHARES,
20, CHANGE ALLEY, CORNHILL, LONDON, E.C.,
Transact business in Stock Exchange Securities and Mining Shares of every description, either for immediate cash or the usual bi-monthly settlements, and also afford advice personally or by letter to executors, trustees, capitalists, and investors of every class in the selection of Securities for safe and profitable investment, their experience of the markets, extending over a period of more than 17 years together with special facilities for acquiring information, enabling them to act beneficially for clients.
They have established Corresponding Agencies in all the principal towns of the United Kingdom, and are prepared to deal in the various local Stocks and Shares at close prices. Orders per post or telegraph receive prompt attention.
INVESTORS SHOULD APPLY for a copy of Messrs. W. J. TALLENTIRE and Co.'s Circular, SENT POST FREE. It contains valuable information on Foreign Stock, Railway, Mining, and General Investments.

TO INTENDING INVESTORS AND SHAREHOLDERS.

MESSRS. W. J. TALLENTIRE AND CO., 20, CHANGE ALLEY, CORNHILL, LONDON, E.C., have the following MINING SHARES FOR SALE.
OFFERS CAN BE MADE, OR PRICES WILL BE FORWARDED:—

50 BODIDRIS	LEAD.	100 MEDLYN MOOR	TIN.
15 EAST CRAVEN MOOR..	do	100 ROOKHOPE	LEAD.
10 EAST VAN	do	15 ROMAN GRAVELS	do
100 GLENROY	do	15 ST. HARMON	do
5 GREAT HOLWAY	do	20 WEST CRAVEN MOOR..	do
20 LLANRWST	do	50 WEST CHIVERTON	do

N.B.—Some of the above will be sold on specially favourable terms to cash purchasers.

CAPTAIN ABSALOM FRANCIS, MINING AGENT, ENGINEER, AND SURVEYOR, GOGINAN, ABERYSTWITH.
FOUR MINES CERTAIN FOR A RISE.

MR. J. S. MERRY,
ASSAYER AND ANALYTICAL CHEMIST,
SWANSEA.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the SOUTH WHEAL MARGARET MINING COMPANY.—The Vice-Warden has, by an Order made in the above Matter, bearing date this 8th day of June instant, APPOINTED CHARES WILLIAM CLINTON, of Truro, within the said Stannaries, an Officer of the said Court, to be absolutely the OFFICIAL LIQUIDATOR OF THE ABOVE-NAMED COMPANY.
FREDERICK MARSHALL, Registrar.
Dated Registrar's Office, Truro, June 8, 1878.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the SOUTH WHEAL MARGARET MINING COMPANY.—Notice is hereby given, that ALL CREDITORS of the above-named company are required, on or before the 22nd day of June instant, to SEND IN THEIR NAMES AND ADDRESSES, and the AMOUNTS AND PARTICULARS OF THEIR SEVERAL CLAIMS, to CHARLES WILLIAM CLINTON, the Official Liquidator of the said company, at the Stannaries Court Office, in Truro, within the said Stannaries.
FREDERICK MARSHALL, Registrar.
Dated Registrar's Office, Truro, June 8, 1878.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the NEW WHEAL HENDRA MINING COMPANY.—Notice is hereby given, that ALL CREDITORS of the above-named company are required, on or before the 22nd day of June instant, to SEND IN their NAMES and ADDRESSES, and the AMOUNTS and PARTICULARS of their SEVERAL CLAIMS, to JOHN HENRY HAMLEY, the Official Liquidator of the said company, at the Stannaries Court Office, in Truro, within the said Stannaries.
FREDERICK MARSHALL, Registrar.
Dated Registrar's Office, Truro, June 8th, 1878.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the NEW WHEAL HENDRA MINING COMPANY.—The Vice-Warden has, by an Order made in the above Matter, bearing date this day, appointed JOHN HENRY HAMLEY, of Truro, within the said Stannaries, an Officer of the said Court, to be absolutely the OFFICIAL LIQUIDATOR of the above named company. FREDERICK MARSHALL, Registrar.
Dated Registrar's Office, Truro, June 8th, 1878.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACTS, 1862 and 1867, and of the ALVIGGAN AND BURNGULLOW TIN MINING COMPANY (LIMITED).—TO BE SOLD, under the direction of the Registrar of the said Court, on Thursday, the 20th day of June instant, at Eleven o'clock in the forenoon, at the ALVIGGAN AND BURNGULLOW MINES, in the parishes of St. Stephens-in-Branwell and St. Mewan, within the said Stannaries, in One or more Lot or Lots, and subject to such conditions as shall be then and there stated and produced, all that the INTEREST of the said company of and in the SETTS under which its mining operations have been carried on, together with the WHOLE of the

MINING PLANT, MACHINERY, MATERIALS, AND EFFECTS

Belonging to the said company, and being within and upon the said mine and elsewhere, within the said Stannaries, and comprising at the said Mine—
ONE 32 in. cylinder ENGINE, with 20 ft. fly-wheel.
ONE 10 ton BOILER, 11 fms. of 10 in pumps, doorpiece, clack, balance-bob and gear, hand pump, horse whim, flat rods, crab winch and chain, two windlasses, double and treble pulley blocks, spanners, iron stairs and rail, several fathoms of launders and ladders, a large quantity of new and other timber, and a quantity of other materials and effects in general use in mines. Also several tons of tinstone.
At the Burngollow Station of the Cornwall Railway, 18 14 in. pumps, one windbore, H piece, and triangle.
And at East Phœnix Mine, in the parish of Linkinhorne, two stamps axles and 24 heads, &c.
To inspect the above, apply to the Bailiff in charge at the mines, and for further particulars to Mr. CHARLES WILLIAM CLINTON, the Official Liquidator of the said company, at the Stannaries Court Office, in Truro.
R. M. PAUL, Truro, Solicitor for the said Official Liquidator.
Dated 6th June, 1878.

NORTH PATRICK LEAD MINING COMPANY
(LIMITED). *IN LIQUIDATION.*

MR. WILLIAM FREEMAN has received instructions from the Liquidator of the above-named company to SELL, BY AUCTION, at the Red Lion Hotel, Holywell, on Wednesday, the 26th day of June, 1878, at One o'clock in the afternoon, the ENGINE, MINING PLANT, MACHINERY, PITWORK, and MATERIALS at present on the Mine; together with the LEASE of the SETT.
The above includes a PORTABLE STEAM-ENGINE, about 7-horse power; about 34 fms. of 7 in. pumps, plunger pole and cage, H piece, cistern, &c., complete, sweep-rods, bobs and connections, about 200 yards of ladders, enginehouse, storehouse, office and fittings, about 250 yards launders and stands, horse whim, with 100 yards chain, and 2 kibbles, miners' dial, and the necessary tools and materials.
The whole will be offered in One Lot as a going concern, subject to conditions to be produced at the time of sale.
Further particulars may be obtained from the Liquidator, Mr. H. E. TAYLOR, 86, London Wall, London, E.C.; Capt. J. WOOLCOCK, Bank-place, Holywell; or from the Auctioneer, Red Lion Hotel, Holywell.

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The mining rights are under the townlands of Cluni, Allihies, Keallogue, and Coom.
There is ample MACHINERY on the mines for carrying on mining operations in the most extensive way, consisting of, amongst other matters, THREE PUMPING ENGINES, THREE DRAWING ENGINES, THREE CRUSHING ENGINES, ONE combined DRAWING and PUMPING ENGINE, air compressor for boring machinery, and two other small engines, smiths' shop, carpenters' shop, engineers' and fitters' shop, with all necessary appliances.
The mines were purchased in 1870 by the company for £100,000, since which large sums have been expended on them.
The quality of the Berehaven ores is far above the average of native ores sold in the English markets.
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For further particulars, apply to Mr. ROBERT CLOGG, Secretary Berehaven Mines, Allihies, Bantry, County Cork; or Messrs. D. and T. FITZGERALD, Solicitors for the company, 20, St. Andrew-street, Dublin.
Dated 5th June, 1878.

TO BE SOLD, BY PUBLIC AUCTION, under Decree of the Supreme Court of Newfoundland in Equity, in a suit between CHARLES FOX BENNETT, Plaintiff, and SMITH MCKAY and LEANDER GILL, Defendants, on Monday, the 2nd day of September next, at Twelve o'clock noon (if not previously disposed of by private sale), at the Court House, in St. John's, Newfoundland, that VALUABLE COPPER MINE and MINING PROPERTY called and known as the

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The mine is held under grant in fee from the Government of Newfoundland, containing two miles in length, by half a mile in breadth; a Licence of Occupation from the said Government, containing one mile square, west of and adjoining the Crown grant and land held under conveyance of fee-simple interests of former owners.
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Conditions of sale will be published hereafter.
PRESCOTT EMERSON, Q.C., Master in Chancery,
St. John's, Newfoundland, January 23rd, 1878.
For further particulars, apply to C. T. BENNETT, Esq., No. 55, Queen's-square, Bristol; Messrs. HENRY BATH AND SON, Gresham House, London; or to PINSENT AND GREENE, Solicitors to the Plaintiff; WINTER AND CARTER, Solicitors for Defendant McKay.

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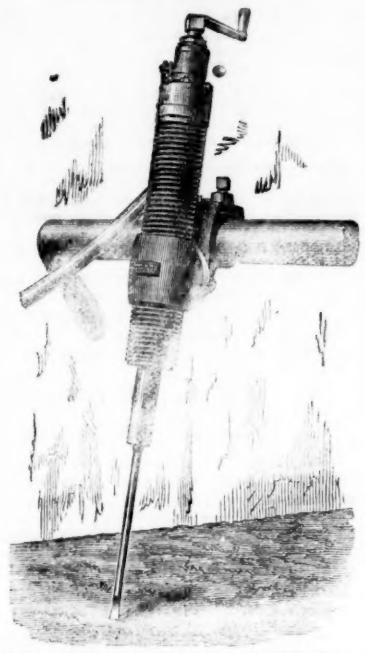

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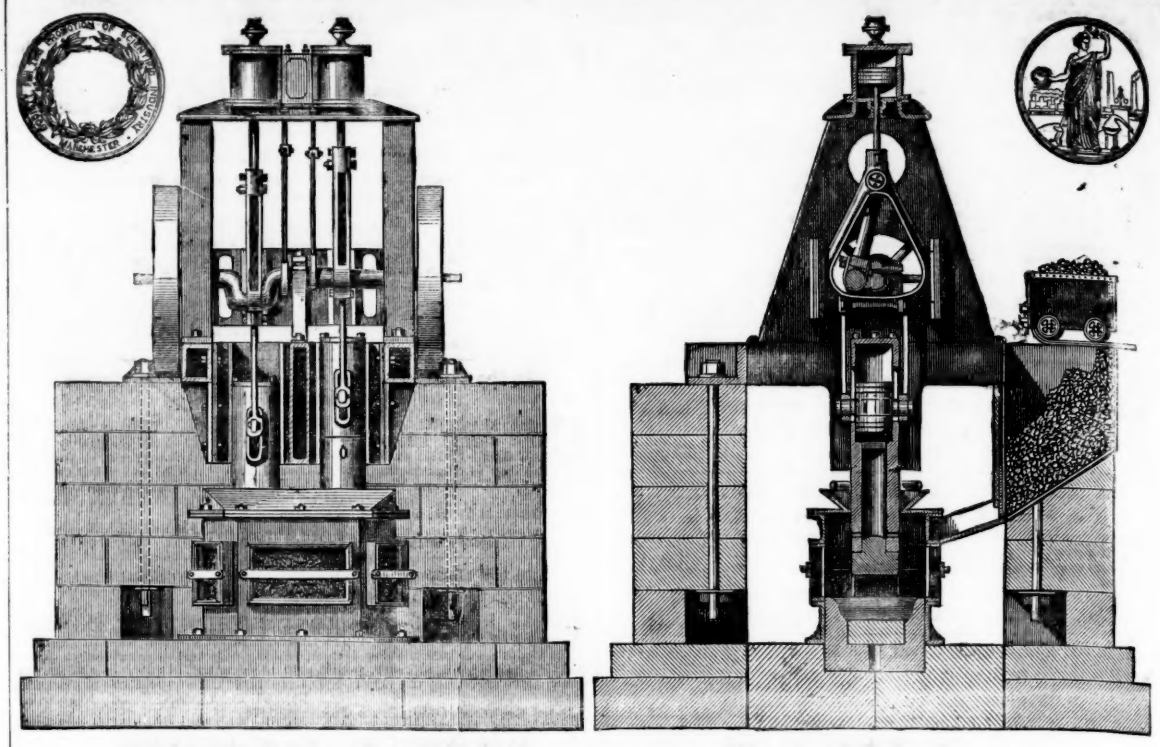

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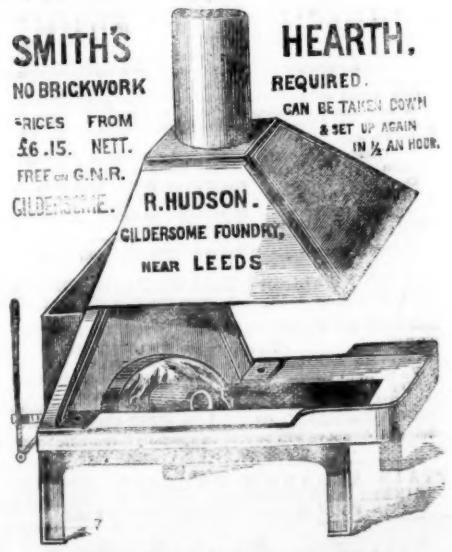

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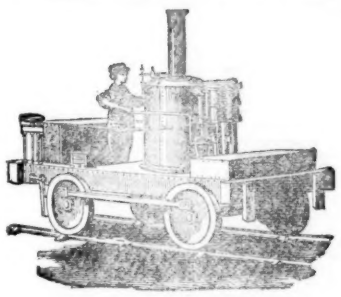

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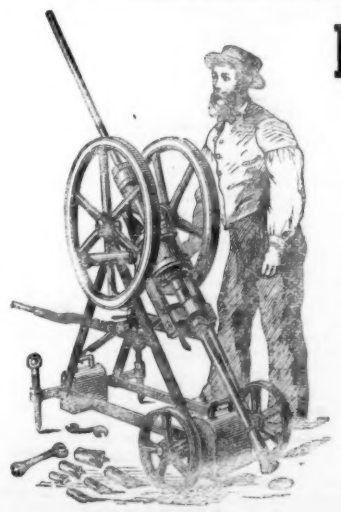

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THE MINING SHARE LIST.

BRITISH DIVIDEND MINES.

Shares.	Mines.	Paid.	Last wk.	Clos. pr.	Total divs.	For sh.	Last pd.
1500	Alderley Edge, *c*, Cheshire*	10 0 0	—	—	12 11 8	5 0	Jan. 1876
4000	Brookwood, *c*, Buckfastleigh	1 16 0	1	⅛ 1	3 16 0	2 0	Nov. 1875
2000	Bryn Alyn,*† *l*, Denbigh	10 0 0	—		0 7 0	7 0	Jan. 1877
400	Cashwell, *l*, Cumberland*	2 10 0	2¼	1¼ 2¼	1 9 6	2 0	Aug. 1876
1100	Carn Brea, *c*, *t*, Illogan†§	36 7 6	42½	40 42½	308 0 0	1 0 0	Feb. 1874
2450	Cook's Kitchen, *t*, Illogan†§	24 4 9	1⅛	1¼ 1½	11 17 0	0 7 6	Jan. 1872
13240	Devon Gt. Consols, *c*, Tavistock†	1 0 0	2⅛	2⅛ 2⅜	116 15 0	0 5 0	July 1877
4296	Dolcoath, *c*, *t*, Camborne	10 14 10	31	29 31	112 11 3	0 5 0	June 1878
5000	East Black Craig,* *l*., Scotland	5 0 0	—	—	0 10 0	0 10 0	Feb. 1877
300	East Darren, *l*, Cardiganshire	32 0 0	—		235 10 0	1 0 0	Aug. 1876
6400	East Pool, *t*, *c*, Illogan	0 9 9	9¾	9¼ 9¾	15 9 3	0 2 6	May 1878
40000	Glasgow Cara.,*† [30,000 £1 p., 10,000 15s. p.]		1⅜	1⅛ 1⅜	0 13 4	0 0 6	Feb. 1878
7500	Gorsedd and Merllyn Cons., *l*, Flint	2 10 0	4½	4 4½	0 5 0	0 5 0	Aug. 1877
15000	Great Dyliffe,* *l*, Montgom	4 0 0	3	2 3	0 2 6	0 2 6	Apr. 1876
13000	Great Laxey, *l*, Isle of Man*	4 0 0	19½	17½ 18½	28 11 0	0 8 0	Apr. 1878
615	Gt. Retallack, *l*, *bl*, Perranzabuloe	5 18 6	—		0 1 6	0 1 6	May 1876
4400	Green Hurth, *l*, Durham*	0 6 0	1¼	1 1¼	1 18 0	0 3 0	Mar. 18.8
2000	Grogwinion, *l*, Cardigan*	2 0 0	3½	3¼ 3¾	0 14 0	0 2 0	Jan. 1878
9830	Gunnislake (Clitters), *t*, *c*	5 5 0	2¾	2½ 2¾	0 13 9	0 1 0	Oct. 1876
60000	Holmbush, *a*, *c*, *s-l*, Callington*	1 0 0	1¾	1½ 1¾	0 4 6	0 0 6	Sept. 187
2800	Isle of Man, *l*, Isle of Man*†	25 0 0	—		82 5 0	0 0 0	Feb. 1876
23000	Leadhills,*† Lanarkshire	6 0 0	3¼	3¼ 3½	0 15 0	0 3 0	Mar. 1878
400	Lisburne, *l*, [illegible]shire	18 15 0	65	55 65	586 10 0	1 0 0	May 18.8
14000	Llanidloes [illegible]omery	3 0 0	1¾	¾ 1¾	0 9 0	0 4 6	Nov. 1876
2000	Mark[illegible]y, *c*, Lit[illegible]kinhorne	5 3 6	5½	3½ 5½	7 15 0	0 2 0	Jan. 1876
10000	Me[illegible] Copper, Hayle*	2 0 0	3⅝	3½ 3⅝	0 2 0	0 2 0	Jan 1878
9000	Mi[illegible]m[illegible], Wrexham*	5 0 0	14	12 14	67 13 2	0 2 6	May 1878
20000	Mi[illegible], of[illegible], *c*, *t*, *l**	7 0 0	—		23 17 6	0 2 6	Jan. 1878
444	No[illegible] [illegible]water	3 9 6	—		1 10 0	1 0 0	July 1877
10389	No[illegible] [illegible]les	2 1 0	—		2 7 6	0 5 0	June 1878
30000	Pa[illegible] [illegible]ld (8794 iss.)	2 0 0	2¼	2 2¼	0 1 0	0 1 0	Feb 1877
6000	Pe[illegible], Redruth	0 8 6	4		0 9 0	0 9 0	June 1877
5000	Pe[illegible]	3 2 6	1	¾ 1	3 18 6	0 2 0	July 187
6000	Pe[illegible] [illegible]th Wales*	5 0 0	5	4 5	0 10 0	0 5 0	Mar. 1878
45793	Pe[illegible] [illegible]wennap	2 0 0	5s	¾ ⅜	0 2 8	0 0 8	Nov. 1875
15000	Pr[illegible] Holywell	1 0 0	2¼	1¼ 2¼	3 14 0	0 1 3	Jan. 1876
10000	Re[illegible] [illegible]gan	2 0 0	2½	2 2½	0 4 0	0 2 0	Jan. 1878
12000	Re[illegible] [illegible]alop*	7 10 0	8	7⅛ 8	7 15 0	0 5 0	Mar. 187[illegible]
512	Se[illegible] [illegible]t. Cleer	1 5 0	70	60 70	742 10 0	1 0 0	Mar. 1878
6123	St[illegible] [illegible]c, Camborne†	6 5 6	11½	11⅛ 12	3 13 0	0 8 0	Apr. 1878
12000	St[illegible] [illegible]rgom	3 0 0	3	2 3	0 6 0	0 3 0	July 1877
10000	St[illegible] [illegible](8000 sh. issued)	1 0 0	—		0 7 0	0 1 0	Oct. 1878
12000	T[illegible] [illegible]*	6 0 0	4	3⅞ 4¼	4 17 0	0 5 0	Dec. 1876
6000	T[illegible] Illogan†	9 0 0	12	10½ 11½	50 8 6	0 5 0	May 1877
15000	V[illegible] [illegible]	4 5 0	24	21 23	22 15 6	0 12 0	Jan. 1878
3000	W[illegible] [illegible]rranzabuloe†	12 10 0	10	8½ 9½	55 10 0	0 10 0	Feb. 1878
1783	W[illegible] [illegible]ay	10 0 0	—		1 19 0	0 4 0	July 1876
812	W[illegible] [illegible]ruth	95 10 0	6½	60 62	28 5 0	1 10 0	May 1878
2048	W[illegible] [illegible]s, *t*, Illogan	3 18 3	3	2½ 3	3 12 6	0 5 0	Oct. 1872
600	W[illegible] [illegible]c, Camborne†	47 0 0	14	12 14	446 0 0	0 15 0	Apr. 1878
12000	W[illegible] [illegible]*, Montgou	3 0 0	3	2 3	0 12 0	0 3 0	Nov. 1877
1024	W[illegible] [illegible], St. Austell	18 0 0	—		18 0 0	1 0 0	Apr. 1878
2948	W[illegible] [illegible]	2 13 10	1¼	1 1¼	8 5 0	0 5 0	July 1878
4295	W[illegible] Agnes	5 4 6	1¾	1½ 1¾	11 19 6	0 2 6	Dec. 1874
25000	W[illegible] [illegible], *t*, Calstock*	1 0 0	—		0 8 6	0 4 0	Sept. 1877
80	Wheal Own[illegible] [illegible], Just†	98 15 0	35	30 35	522 10 0	4 0 0	Aug 1872
3000	Wheal Peevor, *t*, Redruth	7 11 0	6½	6¼ 6¾	0 5 0	0 5 0	Apr. 1878
2000	Wheal Prussia, *t*, Redruth	0 5 0	—	6¼ 6¾	0 4 0	0 1 0	July 1877
10000	Wye Valley, *l*, Montgomery*	3 0 0	2	1¾ 2¼	0 10 6	0 4 6	Oct. 1876

FOREIGN DIVIDEND MINES.

35500	Alamillos, *l*, Spain*†	2 0 0	1½	1¼ 1¾	1 19 3	0 1 0	April 1878
30000	Almada and Tirito Consol., *s*†	1 0 0	½	¼ ⅜	0 6 3	0 1 0	May 1876
20000	Australian, *c*, South Australia†	7 7 6	2	1½ 2	0 19 6	0 1 6	July 1877
10000	Battle Mountain,* *c*, (6240 part pd.)	5 0 0	—		0 10 0	0 10 0	Nov. 1872
15000	Birdseye Creek, *g*, California*	4 0 0	1	¾ 1	0 14 0	0 2 6	June 1874
20000	Cape Copper Mining,*† So. Africa	7 0 0	34½	33 34	31 7 6	0 17 6	June 1878
34433	Cedar Creek, *g*, California*	5 0 0	—	⅛ ⅜	0 5 0	0 2 6	June 1872
35000	Cesena Sul. Co., Romanga, Italy*	10 0 0	—		0 10 6	0 3 0	Aug. 1877
15000	Chicago, *s*, Utah*	10 0 0	1	½ 1	2 8 0	0 4 0	Nov. 1876
65000	Colorado United, *s-l*, Colorado*†	5 0 0	3¼	4⅜ 4⅝	0 13 6	0 4 0	Jan. 1878
10000	Copiapo, *c*, Chili† (£20 shares)	16 15 0	—		7 11 5	0 3 0	May 1877
100000	Don Pedro North del Rey*†	0 16 0	⅞	½ ⅝	2 5 9	0 2 0	Mar. 1878
23500	Eberhardt & Aurora, *s*, Nevada*†	10 0 0	8¼	6½ 7	1 8 0	0 3 0	Dec. 1877
70000	English & Australian, *c*† B. Aust.	2 10 0	1⅛	1⅛ 1⅜	2 15 9	0 1 0	Mar. 1877
30000	Flagstaff, *s*, Utah*	10 0 0	⅞	⅝ ⅞	4 2 0	0 5 0	July 1878
25000	Fortuna, *l*, Spain*†	2 0 0	5½	4½ 5	6 19 10	0 5 0	April 1878
55000	Frontino & Bolivia, *g*, New Gran.*†	2 0 0	2	1⅝ 2	0 1 0	0 1 0	June 1878
30000	Gold Run, *hyd.*	1 0 0	—		0 2 4	0 0 4	Oct. 1872
68000	Kapunda Mining Co. Australia†	1 3 0	—		0 2 4	0 0 6	June 1873
30000	Last Chance, *s*,* Utah	5 0 0	1¼	1 1¼	0 14 0	0 2 0	July 1873
15000	Linares, *l*, Spain*†	3 0 0	6	5 5½	17 7 10	0 5 0	April 1878
65000	London and California, *g**†	2 0 0	5/16	⅜ ⅜	0 1 0	0 1 0	July 1878
7837	Lusitanian, Portugal*† (£5 sh.)	3 10 0	—		1 11 6	0 1 6	Mar. 1878
5000	Mamm Copperopolis of Utah, *c*, *s*	10 0 0	—		0 5 0	0 5 0	Dec. 1872
5000	Mountain Chief, *s*, Utah*	10 0 0	—		0 4 0	0 4 0	Jan. 1873
10000	Pontgibaud, *s-l*, France†	20 0 0	29	26 28	25 8 0	1 11 0	Nov. 1877
100000	Port Phillip, *g*, Clunes*†	1 0 0	5/16	⅛ ⅜	1 10 0	0 1 0	Jan. 1878
54000	Richmond Consols, *s*, Nevada*†	5 0 0	12	12¼ 12¾	4 11 6	0 7 6	May 1878
40000	Santa Barbara,* *g*, Brazil	0 10 0	1½	1¼ 1¾	0 4 9	0 1 0	April 1878
120000	Scottish Australian Mining Co.*†	1 0 0	1¾	1⅜ 1¾	15 per cent.		May 1878
80000	Scottish Austral. Mining Co., New	0 10 0	⅜	⅜ ⅜	15 per cent.		May 1878
112500	Sierra Buttes, *g*, California*†	2 0 0	2⅛	1¾ 2	1 18 0	0 2 0	Oct. 1877
30000	South Aurora, *s*, Nevada*	5 0 0	⅛	⅛ ⅛	0 14 2	0 2 0	Nov. 1873
£25[illegible]000	St. John del Rey*† (£5 stock & multiples dealt in)		305	315	½ year, 17½ p. ct. for June		1878
20000	Tolima, *g*,* So. America	5 0 0	—		0 11 6	0 6 6	May 1874
25000	Victoria (London)*, *g*, Australia	1 0 0	¾	⅝ ¾	0 12 6	0 0 7½	Jan. 1878
15000	Western Andes, *s*,* New Granada	5 0 0	—		0 12 0	0 12 0	July 1876
21000	W. Prussian (3500 pref. sh. 10*l.* pd)	10 0 0	11	10½ 11	1 8 0	0 4 0	Jan. 1878

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Clos. Pr.	Last Call.
5000	Anguilla Phosphate, West Indies (4000 issued)	10 0 0	—		Fully pd.
12000	Argentine, *g*, Argentine Republic	5 0 0	¾	¼ ¾	Fully pd
8000	Bellavista, *s*, Peru* (£10 shares)	10 0 0	—		Fully pd.
30000	Blue Tent, *hyd.*, California	5 0 0	3	3 3¼	Fully pd.
49935	Chontales, *g*, *s*, Nicaragua*†	2 0 0	⅛	⅛ ⅜	Fully pd.
16000	Condes of Chili, *s-l*	5 0 0	—	¾ 1¼	Fully pd.
20000	English Australian, *g*, Victoria*	1 0 0	7/16	⅜ ⅞	Fully pd.
35000	Excelsior Hydraulic Gold Washing Co., California*	6 0 0	—		Dec. 1871
100000	Exchequer, *g*, *s*, California*†	1 0 0	2s.	1s. 2s.	Fully pd.
40000	Holcombe Valley, *g*,* California	1 0 0	—		Fully pd
8000	Hornachos,* *s-l*, Spain	10 0 0	—		Fully pd.
12000	Hultafall,* *l*, *bl*, Orebro, Sweden	5 0 0	16	15 16	Fully pd.
12000	Hunter Consolidated, *s-l*, Utah	10 0 0	5	4 5	Fully pd.
20000	Imperial Brazilian Collieries, Brazil*	5 0 0	—		Fully pd.
100000	I. X. L., *g*, *s*, California*	1 0 0	—		Fully pd.
50000	Javali, *g*, Nicaragua*	2 0 0	—		Fully pd.
3500	La Manche, *l*, Newfoundland	10 0 0	5/16	7s. 9s.	Fully pd.
12000	Lanestosa,* *l*, *z*, Viscaya, Spain (£2 shares)	1 15 0	—	—	Fully pd.
75000	Malabar, *g*, Colombia* (67165 issued)	1 0 0	—		Mar. 1876
40000	Malpaso, *g*, Colombia* (7400 pref. shares, fully paid)	1 0 0	¼	⅛ ¼	Fully pd.
12000	Menzenberg, *c*, Hounef, Germany*	5 5 0	5/16	¼ ⅜	Fully pd.
4588	New Bensberg, *i*, *l*, Germany	5 0 0	—		Fully pd.
60000	New Quebrada, *c*, Venezuela*	5 0 0	—		Nov. 1876
20000	New Zealand Kapanga, *g*, Coromandel*	5 0 0	1⅞	1½ 1⅞	Fully pd.
3000	Oregon,* *g*, Oregon, U.S. (preference shares)	4 0 0	5/16	⅜ ⅜	Fully pd.
53000	Panulcillo, *c*, Chili*† (£80000 debentures)	4 0 0	—		Fully pd.
8000	Pestarena United, *g*, Italy*†	3 0 0	¾	⅝ ¾	Fully pd.
50000	Providencia and New Rosario, *s*, Mexico*	1 0 0	3/16	4s. 6s.	Fully pd.
50000	Rica, *g*, Colombia* (40000 issued)	1 0 0	—		Fully pd.
£2,181,000	Rio Tinto,* *c*, Huelva, Spain	Stock	⅛	⅛ ¼	Fully pd.
1000000	Rossa Grande, *g*, Brazil*† (£1 shares)	0 19 0	65	65 67	Fully pd.
50000	Russia Copper, Orenburg and Ufa*†	10 0 0	—		July 1875
25000	San Pedro, *c*, Chili*	2 0 0	1/16	1/16	Fully pd.
10000	Silver Plume, *s*, Colorado*	1 0 0	—		Fully pd.
30000	Tecoma, *s*, Utah*	10 0 0	5/16	⅜ ⅝	Fully pd.
48174	United Mexican, *s*, Mexico*†‡	3 0 3	3¼	3 3⅛	May 1875
14000	Utah, *g*, *s-l*, Utah*	5 0 0	—		Fully pd.
50000	Virneberg, *c* Rheinbreitbach, Germany* (£2 shares)	1 15 0	—	—	Jan. 1878
18000	Yorke Peninsula, *c*, South Australia	1 0 0	—	⅜ 1⅛	Fully pd.
40000	Yorke Peninsula, *c*, South Australia Preference	1 0 0	1⅛	⅞ 1⅛	Fully pd.

§ Have made calls since last dividend was paid.

FOREIGN AND MISCELLANEOUS STOCKS, BONDS, LOANS, AND TRUSTS.

	Closing Prices	
Argentine, 1868, 6 per cent.	75	77
Bolivia, 6 per cent.	26	27
Brazilian, 1865, 5 per cent.	90	92
Chilian, 1866, 7 per cent.	103	105
City of Providence, 5 p.c. coupon bnds	102	104
Egyptian, Gov. preference	72	72½
Do., unified debt, scrip	55½	56
Do., 7 per cent., V.M.L.	79	81
Do. 9 per cent. guar.	78	82
Do., K. Daira Sanieh	53	56
Foreign and Col. Gov. Trust, 6 p. ct.	70	75
Do., 5 per cent., 2d issue	57	62
Do., 6 per cent., 3d issue	60	65
Do., 1872, 4th issue	56	61
Do., 1873, 5th issue	56	61
Peruvian, 1870, 6 per cent.	15¾	16¾
Do., 1872, 5 per cent	13½	14
Russian, 4½ per cent. L. Mort.	70	76
Spanish, Quicksilver Mort., 5 p. ct.	98	100
United States Mort., 6 per cent.	97	99

NON-DIVIDEND MINES.

Shares.		Paid.	Last wk.	Clos. pr
40000	Aberdaunant, *l*, Llanidloes*	1 0 0	1	¾ 1
10000	Aberystwith,* *s-l*, Cardigan	5 0 0	—	
80	Albion, *i*, Cornwall	100 0 0	—	
7800	Alvig. & Burng.,*†, St. Aust.	3 0 0	1¾	1½ 1¾
12000	Assneton,., Carnarvonshire*	5 0 0	1	¾ 1
50000	Ballycummisk,* *c*, Schull	2 0 0	—	
12000	Bedford Unit.,* *c*, Tavist. (*l.* liab.)	0 1 0	¼	⅛ ¼
800	Blaen Caelan,* *l*, Cardigan	3 0 0	5	4 5
3937	Sine Hills, *t*, *c*, St. Agnes	3 12 6	¾	½ ¾
30000	Bodidris,* *l*, *bl*, Denbighshire	1 0 0	1⅜	1⅛ 1⅜
1000	Bollihope Vale,* *s-l*, Durham	5 0 0	—	
200	Botallack, *t*, *c*, St. Just†	123 15 0	—	
2000	Bowden Hill,* ma[illegible]	1 0 0	—	
6000	Bradwell Moss Rake	1 0 0	1	⅜ 1
50000	Cambrian,* *s-l*, *c*, Cardiganshire	2 0 0	3¾	3 3¼
3348	Cargoll, *s-l*, Newlyn†	7 4 0	2¾	2 2¼
10000	Caron, *l*, Cardigan*	2 0 0	2½	2 2½
20000	Central Foxdale, *l*, I. of Man*(*l.* sh.)	1 5 0	—	
10000	Central Van,* *l*, *bl*, Llanidloes	5 0 0	—	
5120	Clementina, *l*, Llanrwst*	1 0 0	1¼	1⅛ 1⅜
7500	Combellack,* *t*, Wendron	2 0 0	—	
6000	Combmartin, *s-l*, North Devon	0 7 0	⅛	⅛
4400	Court Grange, *s-l*, Cardiganshire	1 0 0	1½	1 1½
2000	Cwm Dwyfor,* *c*, *s-l*, Carnarvonsh	1 0 0	—	
5000	Cwmystwith (New) [*bl.* shares]	4 0 0	—	
180	D'Eresby Cons., *l*, *bl*, Carnarvon	10 0 0	13	10 12
512	D'Eresby Mountain, *l*, *bl*, Llanrwst	20 0 0	100	80 100
2000	Dennighshire Consolidated, *l**	3 0 0	1	1 1¼
12000	Derwent,* *l*, Durham	4 0 0	2	1¾ 2
10000	Dubby Syke, *l*, Durham*	0 15 0	⅜	6s. 7s.
6144	East Caradon, *c*, St. Cleer†	2 19 0	1	¾ 1
4000	East Chiverton, *c*, Perranzabuloe	7 1 0	3	2½ 3
3000	East Craven Moor*, *l*, Pateley Bdge	10 0 0	10	9 10
600	East Goginan, *l*, Cardigan	2 0 0	—	
18000	East Van, *t*, Llanidloes*	5 0 0	5	4¼ 4¾
1722	East Wh. Lovell, *t*, Helston	9 1 0	⅛	¾ ⅛
20000	Elgar,* *s-l*, Cardiganshire	1 0 0	⅜	⅜ ⅜
8000	Fronvellan, *l*, Mont.* [4000 sh. fy. pd.]	1 0 0	—	
3250	Gawton, *c*, Tavistock	4 5 6	¾	⅛ ¾
12000	Glan Clwyd,* *l*, Gwyddelwern	1 0 0	—	
14000	Glenroy,* *s-l*, Isle of Man	4 5 0	1	¾ 1
10000	Glyn,* *l*, Llanidloes	2 0 0	¾	½ ¾
12000	Goginan, & Level Newydd, Card., *l*	2 10 0	—	
100000	Gold, *g*, Merionethshire	1 0 0	—	
20000	Goreu,* *s-l*, Carmarthen	1 0 0	1	¾ 1
20000	Gt. E. Foxdale, *l*, I. of Man (*l.* sh)	0 18 0	—	
12000	Great Holway,* *l*, Flintshire	5 0 0	5½	5 5½
9500	Great Pant-y-Pydew, *l*, Holywell	2 0 0	—	
253	Gt. Wheal Eleanor, *t*, North Bovey	1 15 0	2	1¾ 2
600	Great Wheal Rodd,* *s l*, Cornwall	0 10 0	1	¾ 1
10000	Harehope Gill,* *t*, Durham (£1 sh.)	0 5 0	—	
600	Hartington Moor,* *carb. l*, Derby	1 0 0	2	1½ 2
6400	Harwood,* *l*, Durham	0 15 0	5s.	4s. 5s.
1024	Herodsfoot, *l*, near Liskeard†	8 10 0	7	6 7
18000	Kingston Down, *c*, Calstock*†	0 6 0	½	¼ ½
5000	Hush Eisteddfod Minera,* *l*	2 0 0	—	
200	Islay,* *l*, Scotland	28 0 0	—	
2500	Killaloe, *sl*, Tipperary†	1 0 0	—	
3000	Killifreth, *t*, Chacewater	2 3 6	¾	⅝ ¾
25000	Kingston Con., *s-l*, Stoke Climsland.	1 0 0	—	
	Ditto, preference	1 0 0	1⅛	1 1⅛
12000	Ladywell,* *l*, Salop	2 10 0	1	¾ 1
12000	Ditto, 10 per cent. pref., *l*. each	0 10 0	5/16	⅛ 5/16
3500	Levant, *c*, *t*, St. Just	9 18 6	—	
6000	Livingstone Consols, *t*, St. Agnes	0 10 0	1	¾ 1
5120	Lovell, *t*, Wendron	0 16 0	2	1½ 2
25000	Llanrhaiadr, *l*, Montgomery*	2 0 0	—	
33000	Llanrwst,* *l*, Carnarvon	2 0 0	4	3¾ 4
24	Mawston,* *l*, South Wales	50 0 0	60	55 60
6000	Medlyn Moor, *t*, Wendron	1 17 4	—	
11000	Melyndwr, *l*, Cardigan*	3 0 0	1¼	¾ 1¼
7000	Mid Devon Copper*	0 6 8	1/16	⅛ 1/16
21000	Ditto	0 1 8	1/16	⅛
11000	Monydd Gorddu, *l*, Cardigan*(Red.)	5 0 0	—	
12000	Morfa Du, *z*, *g*, *s*, Anglesea	0 12 6	¾	⅝ ⅞
25000	Nant-y-Ronen, *s-l*, Cardigan*	1 0 0	—	
15000	Nascent Copper*	1 0 0	—	
4768	New Bronfloyd,*., Cardigan (*bl.* sh.)	3 16 0	4½	4⅜ 4½
8000	New Dolcoath, *t*, *c*, Camborne*	3 0 0	1¾	1½ 1¾
20000	New East Foxdale, *s-l*, Isle of Man.	0 18 0	—	
15000	New Fowey Consols, *t*, St. Blazey*.	3 0 0	2	1½ 2
1492	New Hendra, *t*, Breage	3 9 0	—	
3200	New South Merlivn, *l*, Flint*	2 10 0	1	½ 1
3500	New Tincroft,* *t*, Lelant	0 0 0	3	2½ 3
5000	New Wheal Emma, *c*, Buckfastleigh	2 0 0	—	
4000	North Cornwall,* *l*, Cornwall	5 0 0	5¾	5½ 5¾
30000	North Laxey,* Isle of Man	1 0 0	¾	⅛ ¾
2000	North Levant, *t*, *c*, St. Just†	12 8 0	1	¾ 1
20000	North Prince Patrick,* *l*, Holywell.	1 0 0	—	
5936	North Treskerby, *c*, St. Agnes	5 7 10	—	
2000	North Wheal Towan, *t*, *c*, Illogan	1 19 6	—	
6400	Oola Hills,* *s-l*, Limerick	5 0 0	—	
12000	Pandora,* *l*, Carnarvon	2 0 0	1	¾ 1
6000	Park Valley,* *s l*, North Devon	0 4 0	1	¾ 1
6000	Parracombe, *s l*, Devon	0 5 0	⅜	⅛ ⅝
16923	Parys Mountain,* *c*, Anglesea	3 0 0	⅛	⅜ ⅛
12000	Phœnix & W. Phœnix, *t*, *c*, Link,§	5 7 3	5	¼ 5
4000	Pateley Bridge, *l*, Yorkshire	8 0 0	2½	1⅛ 2⅛
7000	Picton,* *s-l*, Holywell, fully paid	1 0 0	4	3 4
12000	Plynlimmon, *i*, Llanidloes*	2 0 0	6s.	4s. 6s.
10000	Port Nigel,* *s-l*, Carnarvonshire	2 0 0	⅛	⅛ ⅛
2000	Prideaux Wood, *t*, Llanivery	5 0 0	—	
5182	Prince of Wales, *c*, Calstock†	2 6 0	2s.	1s. 2s.
6000	Relistian Consols, *c*, Gwinear	0 10 0	5/16	⅛ ⅜
15000	Rookhope, *l*, Durham*	1 10 0	1	¾ ⅞
5000	Silvercross,* *c*, *t*, Marazion	1 0 0	—	
4200	Snowbrook, *s-l*, Montgomery	5 0 0	—	
000	So. Cwmystwith, *l*, Cardiganshire.	2 0 0	4	3 4
3000	South Darren, *l*, Cardigan*	1 10 0	2⅛	2 2¼
30000	South de Eresby Mountain, *l*	1 0 0	1⅜	1⅛ 1⅜
512	South Dolcoath, *c*, *t*, Redruth	12 5 0	1⅜	1 1⅛
5000	So. Molton Cons., *s-l*, No. Devon	0 3 6	1	¾ 1
18000	South Roman Gravels, *l**	1 10 0	5/16	⅛ 5/16
6000	South Roskear, *t*, *c*, Camborne	7 5 0	—	
6000	South Tolcarne, *t*, *c*, Camborne	2 11 6	¾	½ ¾
927	South Wheal Crofty, *c*, Illogan	40 0 10	8	8½ 9½
4500	South Wh. Frances, *c*, Illogan†	7 12 4	3¼	3¼ 3¼
5000	St. Lawrence, Amal., *l*, Flintshire*	2 0 0	—	
10000	St. Patrick, *l*, Halkin, Holywell*	1 0 0	1	¾ 1
6000	Success, &c., *i*, Derb. (12,000 *l.* called)	1 0 0	—	
16000	Sunnyside,* *l*, Durham	2 0 0	2½	2 2½
30000	Talybont, *s-l*, Cardiganshire	1 0 0	1¾	1 1⅛
6400	Teesdale,* *s*, Durham	1 0 0	⅛	⅜ ⅛
14000	Teign Valley, *l*, Dar., Bridford	1 0 0	—	
10000	Temple, *l*, Cardigan*	1 0 0	5¼	5 5¼
10000	Tolgus Consols,* *c*, Redruth	5 0 0	4½	4 4½
6000	Treleigh Wood, *t*, Redruth	6 1 0	—	
12000	Trethellan, *s-l*, Crantock*	2 0 0	—	
640	Truro*, *l*, Nerquis, Flintshire	10 0 0	—	
10000	Tyn-y-Fron,* *l*, Cardigan	1 0 0	1¼	1⅛ 1⅜
20000	Van Consols, *i*, Llanidloes*	2 10 0	⅛	⅛ ⅛
1000	Vaughan*, *i*., Cardiganshire	10 0 0	—	
12000	West Assheton, *l*, Carnarvon	1 0 0	1¾	1¼ 1¾
6000	West Basset, *c*, Illogan†	6 13 4	¾	½ ¾
5500	West Combmartin, *s-l*, North Devon	1 0 0	—	
7000	Ditto	0 2 6	—	
3000	W Craven Moor, *l*, Pateley Bridge*.	10 0 0	10	9 10
5000	West Godolphin, *t*, *c*, Breage	2 10 0	1¼	1 1¼
12000	West Goginan,* Cardiganshire	2 0 0	1¼	¾ 1¼
10000	West Llangynog, *s-i*, Montgomery.	2 0 0	—	
3000	West Mary Ann, *l*, Menheniot	0 3 6	¾	⅛ ¾
50000	West Milwr, *s-i*, Flint	1 0 0	—	
5000	West of England Granite Company.	2 0 0	2	2
20000	West Pateley Bridge, *l*, Yorkshire	1 0 0	2½	2 2¼
1000	West Roskear, *t*, *s-i*, *bl*, *c*, Camborne.	2 0 0	17	15 17
12000	West Tankerville,* *i*, Salop	3 0 0	¾